

Rulemaking: Take-Off and Landing of Drones in State Parks

Public comments received April 4, 2022, 11:00 am through April 8, 11:25 am



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Friday, April 8, 2022

Commenter name (if provided):

Commenter email (if provided):

Vanessa Morgan

vannabella7@gmail.com

Public comment:

I cherish the Oregon coast, but I don't rely on it to protect my children or feed my family. But many coastal species, particularly shorebirds and seabirds, do rely on this habitat to do just that. Their needs for survival need to take precedence over hobby drone users.

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you for your time and careful consideration of this matter.

Respectfully, Vanessa Morgan Portland, OR



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Richard Demarest

rdd@demarests.com

Public comment:

I have seen first hand the disturbances to Black Oystercatchers and Snowy Plovers caused by human interactions. We must protect wildlife from Humans and their technologies!

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you for this opportunity to comment.

Richard Demarest



Oregon Parks and Recreation Department

Proposed rule change:

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Commenter name (if provided):

Commenter email (if provided):

Patricia Armstrong

patriciajane@gmail.com

Public comment:

To All Whom This Concerns,

Please, make wildlife protection your highest priority in regards to drones. We humans have done a pretty damn good job of destroying our environment when left unregulated.

Sincerely, Patricia Armstrong Yachats, Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Claire G

Public comment:

Hello,

Date comment received:

Friday, April 8, 2022

Commenter email (if provided):

claireegillies@gmail.com

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Claire G



Oregon Parks and Recreation Department

Proposed rule change:

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Commenter name (if provided):

Commenter email (if provided):

Jim Rynicki

konajimdiver@gmail.com

Public comment:

By MATTHEW BROWN, Associated Press (April 6, 2022, at 6:40 p.m.) BILLINGS, Mont. (AP) — A subsidiary of one of the largest U.S. providers of renewable energy pleaded guilty to criminal charges and was ordered to pay over \$8 million in fines and restitution after at least 150 eagles were killed at its wind farms in eight states, federal prosecutors said Wednesday.

Above is just the tip of the iceberg. Commercial solar energy designs that use a magnified focus of solar energy have been burning and vaporizing birds for many years. Toxic waste including plastics that breakdown to small particles(also nano sizes) are damaging and killing marine and coastal wildlife. I think you have much bigger problems than going after drone pilots. I am a licensed hobby drone pilot and respect nature and take precautions to avoid disturbing wildlife. I disagree with your efforts to block drone pilots from Oregon State Parks.

Jim Rynicki Scientist - Florence, Oregon



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Friday, April 8, 2022

Commenter name (if provided): Commenter email (if provided):

Elaine Karnes karnese@peak.org

Public comment:

The state park ocean beaches and adjacent land should be restricted to not allow drone use. This area needs to be protected for migrating and nesting birds and other wildlife. People also benefit by not being harassed by conflicting use on the beach. Please NO DRONES!!



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Commenter name (if provided):

Commenter email (if provided):

Chris Sagherian

sagherian04463@gmail.com

Public comment:

Thanks for taking the time to create these rules. Contrary to what some might think, drones are not dangerous, they're not harmful to anyone and nobody is using them to take photos of civilians (you're not that interesting). What we as drone pilots do like is flying around the natural beauty of a location. We love flying through trees and capturing videos and photos of a location that express the true beauty of that place in a way only drones can. When drone pilots share videos they're not just sharing what the drone captured. They're sharing the beauty of your park and parks like it with the world, helping to spread a greater awareness for saving these kinds of parks.



Oregon Parks and Recreation Department

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Date comment received:

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Friday, April 8, 2022

Commenter name (if provided):

Commenter email (if provided):

Dr. Rachel Sitler

rachelmsitler@gmail.com

Public comment:

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Dr. Rachel Sitler, DVM



Oregon Parks and Recreation Department

Proposed rule change:

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Commenter name (if provided):

Commenter email (if provided):

Ken Potter

kenyan.potter@gmail.com

Public comment:

Good morning,

I would like to weigh in on the drone issue. I live and work in Cannon Beach, Oregon, very close to Ecola State Park, and not far from Oswald West State Park. I firmly believe that drones are a major disruption to wildlife and should not be used in State Parks, except for Search and Rescue purposes. For the humans, I feel that the Parks should be a refuge from prying people with invasive devices. No one wants to be photographed without their permission, especially subversively. The buzzy noise and visual interference have no place in the beauty of our hard-won sanctuaries of natural wonder.

Many thanks, Ken Potter Cannon Beach, OR



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Clark McMahon

clarkpants@hotmail.com

Public comment:

Please don't let drones overrun our Oregon state parks and beaches!

As an avid surfer, there is nothing more insidious than a tranquil morning on the ocean being swarmed by the terrible whirring sound of some idiot's little spy plane buzzing around my head.

I urge you to restrict drones and allow them only for limited purposes, such as science or rescues, or by special permit, and only in limited areas, where they will not disturb birds and wildlife and our cherished recreation experiences.

Oregon is home to breeding habitat for one-half the West Coast's seabirds. The Oregon Black Oystercatcher project has documented 3 drone disturbances per week to nesting birds, and there are many accounts of disruptions to other seabird colonies. OPRD needs to consult with experts at the US Fish and Wildlife Service, which manages the adjacent Oregon Islands National Wildlife Refuge as well as threatened species, such as western snowy plovers, for input to assure that drones won't harm birds and wildlife.

State parks and beaches are also places where I go to recreate —to enjoy natural beauty, to find peace and solitude, and to watch wildlife. Drones make intrusive and startling noise, invade privacy, can be unsafe, and disrupt birds and wildlife. I am concerned that increasing drone use is incompatible with and will detract from these ways that I and many other local residents and visitors use and enjoy parks and beaches.

With park visitation increasing, we need for OPRD to be proactive now about balancing responsible drone use with exceptional visitor experiences and minimizing wildlife disturbances into the future.

Plus, where it is legal to do so, citizens of the state will be shooting down drones when it becomes burdensome on the eyes and ears. This blasting of drones will simultaneously escalate class tensions and contribute to the amount of plastic and litter, as the drones shot down will land in steep terrain, in bodies of water etc... We don't want any of these things to happen.

Please ban drones in state parks and beaches, except in limited areas to protect our wildlife and recreation experiences.



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Commenter name (if provided):

Commenter email (if provided):

Kathy Bowman

ceili999@yahoo.com

Public comment:

I urge Oregon State Parks to close drone use in State Parks and the ocean shore. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

This is also critical during fire season, when drones in the area can shut down fire fighting aircraft, putting habitat, structures, people and wild and domestic animals at risk.

FAA has are existing federal guidelines for drone flights, and those should also be integrated into the plans, especially as just offshore there are federal designated wildernesses managed by US Fish and Wildlife Service. Please engage them.

Thank you, Kathy Bowman Joseph, OR



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Commenter name (if provided):

Commenter email (if provided):

Tammy Spencer

tammy spencer@icloud.com

Public comment:

Hi There,

I want to urge Oregon State Parks to close drone use in all State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. By doing this it will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the thousands of people that visit our iconic state parks and natural areas. Drones in our parks must stop.

Over a million seabirds and shorebirds nest along Oregon's coastline every year including the endangered Western Snowy Plover and species of concern like the Tufted Puffin and Black Oystercatcher. This opportunity to regulate drones will also help preserve peaceful experiences for those who want to explore Oregon's natural places and to recreate safely.

Wildlife disturbances due to improper drone use are increasing on Oregon's iconic coast and state parks where thousands of visitors come every year. As visitation increases we need to be proactive to minimize wildlife disturbance balanced with appropriate drone use. Sent from one of my devices.

Tammy Spencer
Portland Audubon Volunteer and Past Board Member



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Commenter name (if provided):

Commenter email (if provided):

Emily Pinkowitz

emilypinkowitz@gmail.com

Public comment:

To Whom It May Concern:

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you, Emily Pinkowitz



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Commenter name (if provided):

Commenter email (if provided):

Candace Galen

galenc@missouri.edu

Public comment:

As a scientist who monitors wild pollinator populations using soundscapes, I urge you to avoid allowing drone use in Oregon's State Parks. Animals from bumble bees to songbirds, amphibians and charismatic species like elk use sound as a mode of communication. Disrupting or masking the mating cues and alarm cues they use by interference from drones goes against the state parks' mission of protecting wildlife and the flowering plants that depend on it. Drone noise will also degrade the natural soundscapes that provide relief and restoration to visitors seeking improved mental health outcomes from visits to our state parks.

Please do the right thing and prevent these damaging consequences of drone use in Oregon state parks.

Thank you.

Candace Galen Portland, OR



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Jerry Boydston

jbml8059@gmail.com

Public comment:

Hi, I believe that allowing drones to fly in state parks is a mistake. Please put a ban on drones use in all Oregon State Parks and beaches. They are noisy and intrude on a person's appreciation of the natural environment. I've already seen and heard them at some beach locations in my area and unless they are being used for some research or other scientific use I see no need for them. Thanks,

Jerry Boydston Port Orford, Oregon



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Commenter name (if provided):

Commenter email (if provided):

Jordan and Gail Dawn

omsdawn@gmail.com

Public comment:

Please please ban drones in state parks and our beaches. We live in Curry County Oregon and use our beautiful parks and beaches as our place of solitude and observing nature.

We have had horrible experiences with drones hovering over us on the beaches. The invasion of what once was a sweet time on the beach watching the birds became an experience of feeling like someone was holding us captive at gunpoint in our own home.

We have no control over what they do or even know who or where they are.

We hiked in the Schrader Grove with a similar experience recently.

Please please ban them from state parks and beaches!

Thank you.

Jordan and Gail Dawn Gold Beach. OR



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Bon Kuppler

bonkuppler@gmail.com

Public comment:

State parks and beaches are also places where I go to recreate –to enjoy natural beauty, to find peace and solitude, and to watch wildlife. Drones make intrusive and startling noise, invade privacy, can be unsafe, and disrupt birds and wildlife. I am concerned that increasing drone use is incompatible with and will detract from these ways that I and many other local residents and visitors use and enjoy parks and beaches.

Please ban drones from public beaches so visitors & wildlife can continue to enjoy them.

Thanks for reading,

Bon Kuppler



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Deanna Mueller-Crispin

deannamac1013@gmail.com

Public comment:

Question or comment from Deanna Mueller-Crispin:

Re. drones in State Parks: I strongly oppose your proposal to "allow drones everywhere except where explicitly prohibited". Drones are TERRIBLY invasive, to people and to wildlife/birds. It is not understandable that you are continuing with this proposal despite so much public opposition. Yous proposal should be turned around to "prohibit drones except where explicitly permitted." Please protect people and wildlife by changing this unwarranted proposal.



Oregon Parks and Recreation Department

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Commenter name (if provided):

Teresa/Max Bird/Beeken

Public comment:

Dear State Parks,

Date comment received:

Friday, April 8, 2022

Commenter email (if provided):

teresa.e.bird@gmail.com

I am writing regarding the use of drones in state parks and on beaches. I am strongly opposed to allowing the widespread use of drones in these areas. These devices have been documented harassing birds and wildlife, and are an interference to the undisturbed experience of nature that visitors to state parks are seeking. I believe that there may be certain high-use areas within state parks that could be deemed suitable for drone usage, if determined that they are far enough from areas important to bird and wildlife - such as known raptor nests, marbled murrelet nesting habitat, oystercatcher nesting sites, or seal pupping areas. Because beaches have a high concentration of different types of birds, wildlife, and habitats, and are sought out by users for relaxation, I believe that no drone use should be allowed on beaches at this time - and that state parks should assess if there are areas on beaches that may be lower in natural values and can be designate for drone use at a later time. In general, high use areas may be suited for consideration for designated drone takeoff/landing/use areas, as birds and wildlife are already more likely to be scarce in these areas, and they are already not places of solitude for recreators. I have found drones to be not only annoying and inhibiting of my ability to experience nature, but also an invasion of privacy as drone users take footage of others regardless of their consent while being able to stay anonymous. These negative aspects to drone use are completely counter to OR State Park's mission of providing natural and scenic recreation sites that can be enjoyed by all.

Thank you for your consideration of my comments. I request that you will please take the route of protecting our birds and wildlife and natural experiences for recreationists - and carefully consider how and where drones may be used in these treasured areas to the Oregon public.

Sincerely, Teresa Bird (and Max Beeken) Port Orford, Oregon



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Friday, April 8, 2022

Commenter name (if provided): Commenter email (if provided):

Diane Follansbee dianenighthawk@gmail.com

Public comment:

Please ban drones in state parks and beaches except in a limited number of locations where there is no threat to wildlife and peaceful quiet that we treasure in our parks.

Thank you.

Diane Follansbee, Coquille/Coos Bay area



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Cody Guldner

codyguldner2@gmail.com

Public comment:

I support allowing drones to take off and land in the parks of Oregon. It is difficult to find places to enjoy the recreational activity of flying drones, so this would allow people who love the hobby more places to fly. Additionally, it will allow more aerial photos and videos of the beautiful parks of Oregon, which could increase tourism



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

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Commenter name (if provided): Commenter email (if provided):

Kathi Lindsay tofukatie@gmail.com

Public comment:

Please ban drones in state parks and beaches, except in limited areas, to protect our wildlife and recreation experiences.

Oregon's wonderful wild experiences need to be protected. Please be proactive on this issue and safeguard our outdoor experiences. It is why many of us live here. .

Thank you. Kathi Lindsay Port Orford



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

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Commenter name (if provided): Commenter email (if provided):

Barbara Spikes bsds49@yahoo.com

Public comment:

Hello. I am writing as an Oregon resident to ask that you don't allow drones in the state parks. I feel that it is invasive to all. This includes humans and all animals that are affected by having someone with a noisy camera by them. Outdoors should be a place where there's solitude. There are plenty of places that drones can be flown where they aren't as invasive.

Thank you for allowing my views to be heard. Barbara Spikes

Oregon Parks and Recreation Department

Proposed rule change:

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Commenter name (if provided):

Commenter email (if provided):

Sara Lovendahl

saralovendahl@charter.net

Public comment:

Dear OPRD

I am writing to encourage you to ban drones in state parks and beaches except for limited use areas.

I live in a coastal community. Recently, my neighbors, my husband and I were sitting on the beach at Tseriadan state park, watching the sunset, when a drone flew low over us and then parallel to us as the sun was setting. We found this very disturbing, marring our peaceful experience.

On another occasion, we were walking through the redwoods at Jedediah Smith state park and again a noisy intrusive drone came at us through the trees. The solitude of the majestic forest spoiled. We could not locate the drone operator.

These are two examples of our privacy violated by the use of drones in our state parks. Many people visit our exquisite state parks for their unadulterated beauty.

Our beaches are home to many shore birds, some endangered. Our forests are populated with birds and animals. Drones to pose a threat to these valued animals, disrupting nesting areas and frightening our beloved furry friends.

I believe I have a right to privacy in the state parks. I also believe the fauna who inhabit the state parks should be protected from drones.

Please ban the use of drones in our state parks and beaches.

Thank you Sara Lovendahl Port Orford OR



Oregon Parks and Recreation Department

Proposed rule change:

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Take-off and landing of drones

Friday, April 8, 2022

Commenter name (if provided):

Commenter email (if provided):

Dianne Ensign

roughskinnednewt@hotmail.com

Public comment:

Thank you for providing this opportunity to comment on the use of drones in parks and on beaches. My experience with drones is that they are alarming and obnoxious, and that our wildlife do not need yet another threat to their existence. I strongly recommend that all state parks and beaches be closed to drone take-off and landings except where they can be safely allowed, and that State Parks should determine where to allow drones based on the best available science.

State Parks should create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts. In areas that are approved for drone use, please include in the rules:

- No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.

All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time. State Parks should include strong enforcement mechanisms in the final rules.

Sincerely,

Dianne Ensign Portland, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Friday, April 8, 2022

Commenter name (if provided):

Commenter email (if provided):

Nick Wagner

n.wagner124@gmail.com

Public comment:

Thanks for providing the opportunity to comment on the proposed State Park rule-making related to drone operations.

I am the owner of ForeSight Drone Services, a drone services provider based in Portland,OR serving the conservation community in Oregon. I am also a Portland Audubon member, and an annual State Parks pass holder. This is an issue that is near and dear to me.

While drones are an increasingly valuable tool for mapping and monitoring, the usage of drones should only be done so when no, or minimal impact to wildlife can be assured. The populations of birds, especially on the coast, already suffer compounding human impacts - coastal development, industrial forestry, disturbances from beach-goers and dogs on foot, and warming, more acidic oceans. We shouldn't permit the harassment of wildlife, especially seabirds, and sea mammals with drones, and Oregon State parks has an opportunity to help protect these populations.

Humbly, my recommendations for the rule-making process are as follows:

- Recommend all state parks and beaches use of drones be prohibited unless otherwise indicated as allowable or designated take-off and landing areas.
- State Parks should determine where to allow drones based on the best available science
- State Parks should create an independent technical working group (including professional drone operators, agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts
- o While designated areas are being determined, status quo drone use would continue (i.e. this would not ban all drone use at any time during the process)
- State Parks should include a final map(s) of designated drone take-off and landing locations on their website
- In areas that are approved for drone use, include in the rules:
- o No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- o Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.
- All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time.

• State Parks should include strong enforcement mechanisms in final rules

Thank you for the opportunity to comment. Sincerely, Nick Wagner ForeSight Drone Services Portland, OR



Oregon Parks and Recreation Department

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Commenter name (if provided):

Ethan Amezcua

Public comment:

I'm hoping to weigh in on an issue regarding drone use in State Parks that appears to be under consideration - even as a licensed drone user, I would like to strongly urge the State Parks to closely regulate drone usage in the Park system. Whether the rationale is for

- protecting wildlife from yet more manmade noise; or
- protecting territorial species from unknown impacts to their sense of territory; or
- protecting the sense of the sanctity in nature for the human visitors; or
- protecting every visitor from the enterprise of any single drone-user,

we should be designating limited spaces for drone use in our State Parks as opposed to generally allowing drone use throughout our State Parks. I sincerely hope that Oregon can set a national trend for closely regulating the use of drones within their State Park boundaries.

Sincerely, Ethan Amezcua



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Simon Daws

Public comment:

Hello OPRD

Date comment received:

Friday, April 8, 2022

Commenter email (if provided):

simondaws@hotmail.com

I am happy to see you are finally addressing the issue of drones in state parks. However, the new rules appear to be very vague and do not go far enough. State Parks are places we go to get away from the intrusions of modern life and relax in a beautiful environment. I have experienced people flying drones in state parks and beaches, and drones are extremely intrusive, annoying and hazardous. One of them crashed about 10' from my son on a beach near Bandon.

I have had arguments with people that do not care that these things should not be flown near wildlife, or around offshore islands, or near human beings that want to enjoy some peace. They are as annoying as the largest mosquito you can think of x 1000. And the people that fly them have no regard for anything but their own enjoyment. They don't care about your statement that "take-off and landing of an unmanned aircraft system must be done in a manner that is reasonable and prudent relative to terrain, prevailing conditions, equipment, personal capabilities, personal safety and the safety of all other park users". This is so subjective and will be interpreted by everyone differently.

I hope OPRD will ban all drones from all state parks to ensure that the vagueness of your current proposals does not cause further problems. You don't have the staff to enforce any of this, anyway, so the only answer is to have signage at all state parks that says "NO DRONES".

Regards

Simon Daws Eugene, OR



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Commenter name (if provided):

Commenter email (if provided):

Woody Dukes

woodrowd668@gmail.com

Public comment:

Dear members of the committee

My name is Woodrow Dukes. I live in Salem, Oregon but I also have a house south of Waldport that has been in the family for over 50 years. I have been a Coast Watch volunteer for Oregon Shores for mile 199 - Beachside/Wakonda Beach - filing reports and dispatches to the Oregon Shores website.

So many things that man has done that have had negative effects on the environment have been a a Pandora's Box. These UAVs have been observed elsewhere for a longer period and some have shown to have had massively serious consequences that this is a situation where we have the ability to have significant control to prevent further damage on our environment. Whether intentional or unintentional, these machines can so massively damaging despite their small size and few, or singularly in number.

Listening to those giving testimony at the March 31st OPRD UAS Rulemaking Hearing, those in support of looser rules based their positions on individual personal freedom where those that testified in favor of tighter restrictions based their positions on science, the protection sensitive ecosystems and the good of society. Most were not even trying to deny all use anywhere. On the contrary, they saw where there could be reasonable compromise.

It is my position that the use of UAVs in Oregon's parks and on its beaches should be restricted. Shore birds must not be harassed, even at a distance. One who testified said that virtually everywhere in a state park is wildlife habitat and the same could be said of our beaches and near shoe environment. These machines have the potential to get up close and personal so stealthily that they must be regulated.

I am also a member of the Salem Parks & Recreation Advisory Board. We have been considering finding ways to manage drone use within the boundaries of the natural areas of our parks to try to avoid the possibilities of interactions with wildlife - especially nesting birds. We understand that we can not regulate UAVs once in the air but we are working to find other ways to help protect wildlife or at least reduce negative impacts whether intentional or otherwise.

Please accept my testimony in support of RESTRICTING the launch/recovery of UAVs in State Parks and on Oregon Beaches based upon science by professionals who know the negative

effects on our environment except in prescribed areas.

Woody Dukes



Oregon Parks and Recreation Department

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Commenter name (if provided):

Commenter email (if provided):

Jeff Pricher

ipricher@srfd.us

Public comment:

Hi Katie.

I just finished watching the meeting from January 28th and have a few questions / comments that would be beneficial to have views and input from the rule advisory committee.

With regret, I realize this is kind of late to the party with requests, but having just been informed about this rule-making process (had no idea that this was currently in process) and with this rule affecting Public Safety, had I known, I would have reached out earlier. Out of curiosity, was there a reason Public Safety was not asked to be part of this process?

As a stakeholder, there is language specific to Public Safety with no input from this stakeholder. After watching the meeting and reading through all 693 pages of the comments, I could not help but notice that there were no comments from Public Safety.

There are a few comments or at least views that may be very important and relevant to consider from Public Safety. It would be nice to be able to respond to the group as opposed to just with the bulk of the public comments and potentially get lost in the shuffle.

A little about who I am, in addition to being the program manager for the UAS program at Scappoose Fire, I am also the program manager for the Regional Disaster Preparedness Organization (RDPO) public safety aviation program. The RDPO program encompasses 5 counties; 4 in Oregon 1 in Washington State and includes fire, public works, emergency management and others. RDPO pilots have responded to other areas in the state to fly UAS missions and work on requests for other state and federal agencies for UAS flight operations.

Another hat I wear is as the Public Safety representative with the Cascade Chapter of AUVSI.

My agency on behalf of the RDPO holds COA's that cover the entire state of Oregon for flights in controlled airspace, above 400 feet and Tactical Beyond Line of Sight (TBVLOS). With this rule covering all parks in the state and knowing some of our pilots will respond state wide via mutual aid or through requests for SAR, Hazardous Materials, Wildfire and others emergencies, the language as written, could negatively impact our operations.

While it may be too late to be a part of this group, would you be open to a conversation in the near

future to discuss this matter before it makes its way to the rule making hearing?

I think there could be some important points for you and the rule advisory committee to consider, specifically as the language is written for Public Safety, as well as educational opportunities for Public Safety responders if they have to operate in or near State Parks.

Thank you in advance for your time and assistance with our questions.

Mahalo, Jeff Pricher Fire Chief Scappoose Fire District



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Friday, April 8, 2022

Commenter name (if provided):

S. Winter

Public comment:

We need strong controls on the use of recreational drones on Oregon beaches. What may be a fun pastime for a few will mean the rest of us are subject to unnecessary noise, intrusion into our enjoyment of nature and the open skies, and (since most are equipped with cameras) invasion of privacy - no one should have to wonder if they're being recorded from above when they just want to take a nice walk on the beach. Let our beautiful public beaches remain a haven for all.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Brian Quan

b2buddy888@yahoo.com

Public comment:

Takeoff and landing of drones should be permitted but with set rules in place. We obviously do not want to be harming wildlife which may have more congestion in certain areas in certain seasons.

Flying drones or quads can help promote the beauty and enjoyment of state parks. It is not to be seen as a danger or annoyance if pilots can follow specific rules. It should not be a free for all. Pilots for instance should not be permitted to fly close proximity to people within an earshot. Pilots need to understand that visitors to the park are not looking for loud noises. We can coexist. We just needs guidance put in place so that all parties understand the expectations.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Public comment:

I visit Oregon's State Parks for peace and quiet and tranquility. My interest is in having absolutely no drone take-off or landing in any of our State Parks. I hate the noise of drones and the intrusion into my visual field. I believe they are not only disruptive to this human, but to all other life forms that spend time in these parks. I'm in favor of the least noise pollution as possible in any public parks. Thank you for accepting public comments.

Sincerely, A. Nony Mous



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Jim McElmurry

jim.mcelmurry@gmail.com

Public comment:

Drone positive talking points

I am for drone take off and landing in state parks. Here are the following reason I would encourage others to consider:

- 1. This is a great source of tourism. I'm not a resident of Oregon, however, as a drone enthusiast, I'm always looking for interesting locations visit and to fly. There are hundreds of thousands others nationally that share in this behavior. The drone hobby is not a cheap one, and as such would bring those with some amounts of disposable income to your areas.
- 2. Drone enthusiast are one of the most effect means of training others and/or outing bad actors. Those that are passionate about the hobby find it even more intolerable when others act in unsafe or disrespectful ways with drones. The drone community goes through great length to reach out and freely share knowledge in how to properly operate equipment, as well as being vigilant for those who are not. If you ban operation of drones, those that are lawful will vacate leaving those who are new and unaware to struggle and/or mis-use their drone. Having a welcoming community present in state parks, policing itself, is a far more effective and cheaper means of behavior modification than trying to enforce this through the few available rangers and law enforcement.
- 3. Banning drone in state parks means more operators will concentrated flying within their neighborhoods instead. If you don't want an abundance of drones fly over your homes, then it makes sense to leave parks open as safe spaces. It is legal to fly drones above your own personal properties, and (within accordance to FAA rules) your neighborhood. However, drone enthusiasts prefer to fly in interesting locations with an abundance of open space instead. In short, if you dislike drones above, then parks must remain free to use, and represent a better option for everyone.
- 4. Responsible drone operations are less invasive than normal photography, or even other visitors. Normal visitors and/or photographers will traverse the land and nature to explore, and find the unique of the location. This contributes to disruption of nature by foot traffic trampling the grounds, and often depositing trash. Drone operations leave no footprints.
- 5. Drone operators are some of the strongest advocates for funding preservation of park lands. As a drone enthusiast, I enjoy a significant sense of connection to the place I'm flying. I acquire a perspective of how the immense parts fit together, and the amazing beauty of it all. That connection

is infectious, in that those that I share videos with also gain an appreciation and wish to visit and embrace the park and its nature. While flight is a privilege to be respected, for me and many other drone operators, it represents ultimate freedom from the normal bounds of our limited perspective on the ground. We want to very much protect that experience, and honor that connection. We do so through continuous staunch support for parks. Please don't take them away from us.

6. Banning drones in parks will deny people an positive opportunity to learn about them. Love drones or hate them, there is a lot of ignorance of what recreational drones capabilities exist. TV shows about military drones, and even UFO shows have generated fear that rational people shouldn't be victim too. Chance engagements with a drone operator at a park offers for people to discover what the recreational activity is, and the spirit of freedom and responsibility it entails, and the fact that recreational drones are not designed or effective for surveillance. This knowledge would help 'rational' people, and prevent extraneous reports of UFOs, or fears that every blinking light in the sky is a unfriendly eye intruding in your privacy. In short, embracing responsible drone operations will remove some public anxiety, and perhaps help with collective mental health.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Randy Benetti, Sr.

blown406@gmail.com

Public comment:

I fly a drone and some of the best pictures and videos I have are along the ocean. Being able to get a different perspective of the wave hitting up against the rocks, or a bell buoy moving around and making noise, or maybe even the birds or seals out on a island rock that is not obtainable any other way is a lot of fun. I am respectful of wildlife and people as to not disturb them by flying close, but I feel it is a great hobby. I am disabled and walking to a lot of places I enjoy seeing isn't something I can do anymore, but flying my drone to capture what mother nature has created is wonderful.. Please don't add further restrictions to a hobby that is already packed with too many rules and regulations.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Patrick Sutton

patrick1@patricksutton.net

Public comment:

First I would like to thank the legislators for taking the time and effort to develop some common sense rules for drone flying within the state park boundaries. This is important because as a drone pilot and photographer/videographer being able to capture the beauty of the state parks from the air allows people to see it from a different perspective and appreciate it even more. I know that drones are given a bad rep from the few that don't fly by the rules. Those are always the ones you hear about. That is not the case for most pilots. We understand that there have to be rules and guid lines so that we can safely fly and share the sky. The knee jerk reaction always to something that people don't understand or like is to 'ban' it. I hope that you will not do that. Allow us to fly respectfully and enjoy the beauty of nature and enjoy the hobby that we love. Thank you.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Leo Barbera leobarbera@icloud.com

Public comment:

As a responsible drone pilot I am for this freedom as I would like to enjoy and showcase the beauty of Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Nick Marsh

nmarsh14@gmail.com

Public comment:

The ability to fly drones in Oregon State Parks and the Coast is so amazing and makes me want to visit them even more and explore them from a different viewpoint. I fully understand prohibiting them from animal nesting areas like the snowy plover, but otherwise we need to keep them open to fly. I have hundreds of hours of fly time in state parks and the coast and have yet to see anyone else flying inappropriately with animals, or people.

I do not fly if it's a busy area, to not disturb people's experience. However, when I do fly, people are always interested in it, asking questions, and want to see the view from the drone. It's amazing. Please keep it open, and allow another way to experience our amazing state. Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Candace Larson

Public comment:

Dear Oregon State Parks,

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

acecandace@gmail.com

Thank you for all you do to provide safe, environmentally-responsible and accessible recreation opportunities on our beaches. I am conservation-minded Oregonian and a frequent State Park user.

I have experienced with increasing regularity the incursion of recreational drones in a wide array of natural areas and wild spaces, including our Oregon State beaches. I have seen recreational drones flush birds off of their resting perches and roosts on numerous occasions and fly very close to nesting areas on sea stacks. This creates obvious stress and peril for already stressed and struggling species, and is an activity in need of clear regulation.

I hope you will restrict any use of recreational drones to areas where wildlife will not be impacted. One way to accomplish this would be to prohibit the use of drones unless they are operating within clearly designated areas (to be determined based on best-available science as determined by a strong technical working group), and to include strong enforcement mechanisms for the rule.

Thank you for considering my comments.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Kelli Ennis

ennis@ci.cannon-beach.or.us

Public comment:

Thank you for providing this opportunity to the public to share our comments and concerns related to drone usage and the proposed rules in our public parks. I am writing as a biologist who works for the City of Cannon Beach as the Director of the Haystack Rock Awareness Program (HRAP), we are an environmental education and stewardship program who promote, through education, the conservation of the intertidal and bird life at Haystack Rock. We have been in operation since 1985 and have the unique position of having data and eyes on a popular sea and shore bird nesting site for over 35 years.

Today I am asking you not allow any recreational drones to land or take off in our beaches and rocky shores and to instead instate a permitting system for those who wish to operate recreational drones in the area. While we cannot regulate airspace, limiting takeoff and landing does give the state some level of control in managing and protecting our wildlife while preserving a peaceful natural environment for visitors that is untouched by the buzz and hum of disrupting electronics. I appreciate the limitations in the draft rules to exclude Marine Reserves, Conservation Areas, and Gardens as well as Snowy Plover Nesting Areas and I think the natural areas not included in these zones must not be neglected in conservation efforts.

Throughout the years, we have seen drastic increases in recreational drone usage along our Oregon Coast – at that same time we have seen dramatic increases in visitor numbers as well, and unfortunately peak visitor and drone usage occurs during shore and sea bird nesting seasons, several of which are endangered or are species of concern. Sea and shore bird ecology has been severely impacted by several growing threats such as habitat loss and destruction, food supply disruption, fisheries bycatch, oil spills, climate change, and human disturbances during critical nesting seasons.

A large part of what we do at HRAP is educate the public on current science impacting our wildlife as well as encourage good recreational etiquette. We have seen our beloved species decline over the years and our once flourishing, resilient ecosystem begin to suffer and take longer to recover from damage; we aim to educate the public on minimizing their impact, but sometimes education alone isn't enough. We need the support of our government and rule makers to protect our ecosystem. For instance, our coastwide Tufted Puffin numbers have seen an over 90% population decline since the 1960s; these are critical times for our wildlife and likely once they are gone from a region they are gone forever.

Drones can pose a major threat to nesting sea and shore birds, even if unintentional, disturbance can cause to total nest abandonment and reduce the likelihood of future nesting attempts in an area. It is my encouragement as a biologist, educator, and wildlife enthusiast that all Oregon beaches and state parks should be closed to drone take-off and landings except with an approved permit. Permit issuance should be referred to a wildlife expert who can assess potential risks, with caution provided during breeding seasons for that region (typically Spring through Fall).

Most harm caused to wildlife by recreational drone usage was unintentional, but intentions don't change outcomes. We have an opportunity to try and get ahead of a rapidly increasing disturbance. Instead of waiting for what happened to 1,500 elegant terns in California who abandoned their nests after a drone crash to occur here in Oregon, we can prevent it from the start.

I recommend that all decisions related to drone take off and landing spaces be based on the best current available science and just like the scientific process, these rules and determinations should evolve with current science. I recommend an independent technical working group that represents a variety of stakeholders (agency, academic, government, NGO, and tribal experts) be created and utilized to review and determine designated drone take-off and landing zones to minimize negative ecological, wildlife, and cultural impacts. Lastly, rules are less likely to be effectively followed unless sufficient enforcement methods and punishments exist, I'd like to see included in the rules recommended enforcement protocols and fines for violations.

I am sympathetic to recreational drone users, what we do at HRAP is to try and teach good environmental etiquette so we can all recreate at our ocean shores and enjoy nature without severely disrupting and impacting it. But currently the threat level is too high for an already declining environment that has been showing less biodiversity, less resilience, and more human disruptions.

Conservation is hard, but recovery and reintroduction are harder - once a species and habitat is gone from an area it's statistically likely it will be gone forever. Good policy, rulemaking, and planning is proactive rather than reactive. I encourage the committee and Oregon State Parks to be proactive in protecting our declining wildlife with proactive restrictions on recreational drone use on our ocean shores rather than being reactive and waiting for severe disruptions to occur.

I recognize that drones have a valuable role in wildlife monitoring and in many industries which is why I encourage a permit-based system for these functions and responsible drone operators. For recreational permits for a specific event and location if a wildlife biologist expert is consulted on the location and adequate education is provided to the operator along with high fines and punishments for violations then I believe this can be a low impact approach. Otherwise, much of our land already allows for drone take-off and landing, we only have so many places where we can escape the buzz and noise of electronics and cars; we should strive to keep peace, quiet, and harmony on our ocean shores for both human visitors and our sensitive birds.

I ask that we support our struggling wildlife, we keep peace and quiet at our ocean shores, sometimes I feel like I am not so much asking as I am pleading, because every day I see the dire situation for our wildlife who cannot speak for themselves. One recreational hobby is not worth the risk to our ocean shore health. I plead to you that we must keep drones out of our ocean shores before we must retroactively move towards conservation only when it's once again much too little much too late.

Thank you for taking these opinions, comments, and recommendations as a biologist and as a representative of the Haystack Rock Awareness Program into consideration.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Thursday, April 7, 2022

Date comment received:

Commenter name (if provided):

Commenter email (if provided):

Chris Galen

christiegalen@gmail.com

Public comment:

Thank you for providing me a chance to comment on the proposed drone policy in State Parks and beaches. I'm against opening up State Parks and beaches to drones as they can cause impacts to nesting and foraging birds and other wildlife species. They also impact the general public that prefers the peacefulness of our state parks and beaches rather than the repetitive noise and invasion of privacy caused by drones.

Drone pilots aren't typically aware of the potential impacts they can cause to wildlife and might not notice that their actions are stressing wildlife because they don't pay attention. For instance last summer in California a drone repeatedly buzzed an elegant tern colony and caused all of the adults (~3,000) to abandon their nests leaving ~1,500 eggs to rot.

All State Parks and beaches should be closed to drone take-off and landings except where they can be safely allowed. State Parks should determine where to allow drones based on the best available science and create an independent technical working group of scientists to determine appropriate designated areas that minimize wildlife, cultural, and recreational impacts. An easy solution would be to not allow drones to fly in parks and beaches during the nesting season from March 15 through September 1 with the possible exception of drone use for scientific research purposes. If it's determined that there are specific locations or times of year where drones are allowed because there would be no impacts to wildlife and cultural resources, State Parks should provide educational signage to inform the public clearly what's allowed and when and what's not allowed in State Parks and beaches. State Parks should also include strong enforcement mechanisms in final rules.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Patrick White

pwhite425@gmail.com

Public comment:

I, as well as many others, fly drones for fun. The vast majority of us are professionals and fly in a way that avoids others and causes little to no disturbance to those around us. I dont understand why people are opposed to drones being used in public places, especially places of natural beauty such as state parks. As a hobbyist and as a photographer, I oppose the notion of prohibiting drones from taking off and landing in public places.

If safety is your concern, then you arent up to date on the current drone regulations that are put in place to keep the public safe from drone operation. Stop over regulating and let us have our good, safe fun.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Peter Van Ess

vaness.pete@gmail.com

Public comment:

Hello.

My name is Peter Van Ess. I am commercial/recreational drone pilot and I live just about 15 minutes from multiple coastal State Parks. Each park offers it's own flavor and our coast has so many stunning scenes. The rules being suggested will ultimately complicate the opportunities for myself and others like me to enjoy the surrounding scenery. When done responsibly drone pilots open up a world of opportunity for taking breathtaking photos of the coast. If drone pilots are reliant on each park creating policy and then within the policy regulated to only certain areas it can quickly degrade the fun out of coming out. On top of that, the purposed rules would essentially ban drones in state park until park managers process and apply the rule for drones. If Park Managers are unable to or just have to many things on their plate and decided to not enact a the suggested process then drones would be essentially banned from flying. I ask you to please reconsider the suggested rule changes. Thank you all for your time and commitment to proposing balanced rules that makes our state parks accessible for all to enjoy in multiple different ways.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Matthew

matthushbeck@gmail.com

Public comment:

Hello,

It's important that the Oregon State Parks stop drone use in State Parks and the ocean shore without specific take-off and landing areas. We need to establish a committee to identify appropriate designated areas for drones that rely on scientific data. This is critical to ensure humans co-exist with wildlife and create a peaceful and safe experience for the thousands of people visiting our state parks and natural areas.

Sincerely, Matthew



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Rosemary Rowe

rosemaryrowe862@gmail.com

Public comment:

I have been an Oregon State Parks volunteer campground host on the coast for several years. Having spent a lot of time in the campgrounds and day use area of the park system, I would like to submit the following comments concerning the proposed rules for drone landing and takeoff.

The proposed rules address only take-off and landing zones. The rules should also address areas where flyover of drones are prohibited.

I support the designation of all OPRD overnight facilities, such as campgrounds, as drone takeoff and landing prohibition zones. To protect personal safety and privacy overnight facilities should also be off limits to drone flyovers.

I support the establishment of take-off and landing zones as well as the prohibition of flyovers in all heavily used beach areas such as the immediate area of beach access points and parking lots to protect visitor safety and prevent user conflict.

I support the establishment of take-off and landing prohibition zones as well as the prohibition of flyovers in any areas where sensitive cultural and natural resources exist particularly those area used by wildlife.

Visitor safety, protection of the quality of the visitor experience, and the protection of resources should be the priorities in developing rules for the use of drones in Oregon State Parks.

Thank you for the opportunity to comment on the proposed rules.

Sincerely, Rosemary Rowe



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Bri Dement

bridement@gmail.com

Public comment:

PLEASE let our drones be free!! we mean no harm, we just like to fly



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received: Thursday, April 7, 2022

Take-off and landing of drones

- .

Commenter name (if provided):

Commenter email (if provided):

Jim Powell

jhp@bendbroadband.com

Public comment:

Katie

Attached are my comments for the Rule Making - Take-off and Landing of Drones

Thanks for the opportunity to comment. Hope you can find a path

Jim Powell Bend, OR Katie Gauthier Oregon Parks and Recreation Department 725 Summer Street NE Ste C Salem, Oregon 97301

Rulemaking: UAS in Oregon Parks and Shores

April 6, 2022

The FAA Dilemma

The FAA has been sadly behind the curve in trying to find effective and meaningful solutions to the rapid promotion and expansion of drone technology and use. Like much of our technologies, there are wonderful potential and actual benefits as well as significant detrimental ones unfolding as society wrestles against its own demons of individual "rights" and contributions to a larger community and environment.

For the past six years, in recertification courses for Certified Flight Instructor privileges, flight schools have offered segments on UAS development, Part 107 and Recreational Remote Pilot certifications. FAA rules are still evolving in attempts to reestablish aspects of air safety lost in a rushed rollout of regulations of UAS use after early adopters and use patterns were ignored. The evolution of requirements, certifications, instruction syllabi and safety practices from the era of "barn stormers" to the present was glacial compared to the need of developing safety solutions for the expanding drone market. Some aspects of using this new type of aircraft and the potential issues it creates has been alluded to during the RAC meetings. Kenji Sugahara is an articulate and passionate advocate for UAS; but a recent webinar from the AOPA Air Safety Institute (ASI) paints a more practical overview of the UAS and non-commercial operators: https://webinars.aopa.org/detail/videos/air-safety-institute-webinars/video/6211000811001/drone-safety:-real-world-risks-rewards?autoStart=true) ga=2.60487460.829584341.1648919430-1775424084.1648919430 - category/videos/air-safety-institute-webinars/1

The highlights and FAA provisions:

- With the exception of category 4 aircraft, no engineering or airworthy standards exist for the usual unmanned aircraft vehicle (UAV) equipment
- "Expect failure" is the current safety admonition. These vehicles fail commonly and may do so without warning.
- Battery endurance is not standard or reliable with some batteries igniting fires during failure or crashes
- Authorized weights up to 55#; speeds may exceed 100 mph
 - The FAA designated four categories of UAV based on weight and the extent, requirement and documentation
 of safety and airworthiness; category 4 requires a valid airworthiness certificate; category 1 must weigh less
 than 8.8 oz and requires no regulated safety certification except protection from rotating propellers.
 - Most of the UAV flown by hobbyists will be category 1 with speeds of < 100 mph
 - Documentation of proper maintenance and safety enhancements depending on category must be available for presentation on request only for category 3 and 4.
- Part 107 pilots must be at least 16 years of age; Recreational Pilots, at least 13 years of age.
- Training and Aeronautical Knowledge tests are required for obtaining either remote pilot in command license; no
 Practical Test or physical demonstration of pilot skills is required. Though the pilot certificate must be renewed every
 24 calendar months, only Part 107 pilots must have "refresher" training an online review of certain knowledge
 areas. The FAA has introduced The Recreational UAS Safety Test (TRUST) and promoting Modeler Community Based
 Organizations (CBO) to help formulate local flying practices. No CBO is yet "authorized" and TRUST is voluntary for
 Recreational UAS pilots.
- Practical safety measures (establishing an exit or termination point, reviewing emergency maneuvers or "checklists" preflight, weather prediction, wind variability) are not commonly practiced by non-commercial operators or UAS pilots without prior traditional pilot training.
- ASI recommends visualizing flying a UAS at the top of an inverted cone within which impact with the ground or objects may occur with an unexpected failure or uncontrolled descent. The diameter of the cone depends on factors like the aircraft, speed and height.
- Flights are supposed to be conducted within line of sight and visible to the operator
- Since April 2021, both Part 107 or Recreational UAS may be flown in "non-sustained" flight over moving vehicles or persons provided category 1 equipment weighs less than 8.8 oz and has no exposed rotating parts that would lacerate a human on impact; category 2 operators have submitted and the FAA has accepted a declaration of compliance with the provisions of Part 107.120 and operates within those parameters; category 3 operators have a current declaration

of compliance with Part 107.160 and operate within the parameters of 107.130. Sustained flight over persons and vehicles are allowed if persons are under covered structures in stationary vehicles; are directly participating in the flight operations; or are within a restricted site specifically for the flight with posted notices of possible overhead UAVs. All UAV must be labelled as to category and registration IDs. Sustained flight over persons is possible with properly functioning broadcasting Remote Identifiers in all categories; category 4 has additional requirements as well.

- Early drone models did not have the identifiers that current models have but they are still being flown. Remote ID is currently evolving and not universal in application or equipment. Though all UAS are expected to have Remote ID by fall of 2023, that is imposed only by attestation, detection and prosecution.
- Flights are supposed to be at or below 400 feet AGL and clear of any air traffic patterns, airports or air operations unless permitted by an FAA waiver or within 400 feet of a higher structure.
- FAA regulations require flights over marine life at a minimum altitude of 1000 feet AGL. Minimal altitudes over wildlife sensitive areas (birds) is 2000 feet AGL for noise and bird strike hazard avoidance. These are applicable to UAS without waivers as part of the National Airspace System (NAS) because airspace planning is part of the pilot preflight responsibilities, just as weather, aircraft airworthiness and the UAS altitude limitations of 400 feet AGL.
- Situational awareness of factors impacting or being impacted by the aircraft is very dependent on the experience, professionalism and perspective of the operator.
- *Night operations* are now allowed for both Recreational and Part 107 pilots after the 2021 Part 107 changes for UAVs containing lighting and strobes that are visible for three miles. Not mentioned in your rules, this type of activity has no place in either parks or on the shores and must be specifically prohibited unless there is an emergency situation.

As Matt Davey and Brady Callahan mentioned, most UAS operators wish to operate safely within permitted parameters but many do not understand the impacts that their "routine" flights may pose for their surroundings. In our current changing social "norms", compliance and consideration is not always a given. Expectation that park staff should be able to decode and enforce FAA regulations in the field or even, if possible, utilize Remote ID to locate a drone owner seem unreasonable one. Yet that is what is being asked in effectively dealing with perceived problems with a given UAS flight.

My takeaways

- > Design your rules with the insight that many current UAS fall or serve out of the air from failures, poor decision making or battery exhaustion
- > Recognize that a significant number of operators will have little experience in handling UAS problems
- > Lithium batteries are known to cause fires
- In designated take off and landing (TO&L) zones, restrict moving vehicles and persons not involved in the operation
- Globally prohibit night operations except for emergencies
- Utilize existing NAS rules to protect sensitive areas and recognize that Class G airspace is uncontrolled and may be subject to local protocols and procedures

The Wildlife Dilemma

It sounds like there is a reasonable amount of knowledge at both a local, state and federal agency and conservation group level to provide accurate information about location and critical times for Wildlife Sensitive Areas and flyways. Not including ODFW in the initial RAC or rule promulgation casts a shadow on current OPRD proclamations the wildlife protection is one of the higher priorities.

The Department of Land Conservation and Development Department requires all counties' Comprehensive Plans to have a Resource 5 and 8 sections that may help you to locate and preserve state approved critical areas. Most will have mapping and coordination with ODFW and local conservation groups as part of the plan. A good plan will also have balanced the resource element and the recreational element to delineate and protect critical habitat areas. While they may not be graphically designated on official FAA sectionals, those areas certainly can be protected by Oregon Aviation Division and local noise abatement and altitude limits just as is done for airports or mass gathering areas such stadiums, fairgrounds and the like. Most will be within Class G or "uncontrolled" airspace from the surface up to but not including either a Class E floor or 14500 feet MSL. Local airports or launch zones and cities may establish with the FAA local protocols affecting altitudes, flight paths and noise. When I served on the Deschutes Planning Commission, we used these types of approaches to work with federal agencies to protect raptor nesting sites from recreational aviation activities such as paragliding and UAS. It was easier when the nesting sites were not readily accessible but falcons and paragliders occasionally sought the same craggy launch points. Seasonal or outright closures were negotiated using the best wildlife data available and it has been, I understand, reasonably

successful for both raptors and gliders. I am not aware that motorized ultralights are allowed in those areas because of noise impacts.

Coupled with the previously mentioned FAA's general provisions for Marine Mammals and Wildlife Sensitive Areas within the NAS, the county and state plans that have been vetted through public process may offer another tool to constructively help protect wildlife and migratory flyways, not only on the ground but in the air.

While children and dogs seem to relish scattering gulls and tidal birds along the surf line, the birds seem to regard us as temporary nuisances. As was discussed in both the RAC and public presentations, wildlife is conditioned to regard aerial intrusions, even with minimal aircraft noise, as predatory threats, especially when nesting. Your education idea is a good one. Unfortunately our species is not uniformly inclined to always remember to treat other species with respect.

My Takeaways

- Utilize existing NAS rules to protect sensitive areas and recognize that Class G airspace is uncontrolled and may be subject to local protocols and procedures
- > Use the FAA wildlife altitude requirements to create no-fly zones over sensitive areas (UAS cannot legally meet the altitude restrictions)
- Prohibit night operations
- > Utilize existing federal, state, and county wildlife inventories and wildlife/habitat expertise to support protections for sensitive and critical areas. Local conservation groups are invaluable for what is current and can guide the discussion; the agencies' vetted inventories and concerned offer the legal clout you may need.
- Protect known or suspected sensitive areas at the onset. The "safeguards" of universal safety certified UAVs, registration, Remote ID and easy identification of an operator are under development and not currently available as a refuge for due diligence. If you persist in the approach of "permitted unless prohibited", this pre-emptive protection will be very important. "Prohibited unless permitted" allows better assessment and vetting while the FAA grinds through its process of improving this part of aviation.
- ➤ Utilize CBOs when they become available to devise UAS guidelines for the local park or shoreline. They will be recognized as a valid enforcement guide as needed.
- > All hands on deck for education

The People Dilemma

Though sparse, the FAA rules regarding TO&L and flight over people and moving vehicles do not fully recognize the hazards of some UAS equipment and operators. Twenty pound objects falling only 6 feet have enough kinetic energy to cause injury to humans and even less weight will injure wildlife such as birds. Your prohibition of UAS within campgrounds is both prudent and reasonable. In those environments, incidents are likely with our current technology despite the best of intentions. Newer equipment, especially after Remote ID is required, may offer better safety and accountability in the future, but not now.

If take off and landing areas are designated, considerations should be given to marking them in a way to preclude people and vehicular traffic given the FAA requirement that anyone in such proximity must be a part of the UAS crew or notified of the hazard area. I have not found any statistical date on the incidence of UAV failure or abnormal operations relative to a given phase of UAS flight

Matt spoke of his experiences at Smith Rocks State Park. The climbing areas certainly should be a no-fly zone. The ASI webinar includes a story of a professional UAS operator doing a pre-event test in an empty stadium where after takeoff one motor of an expensive drone failed and the aircraft immediately veered sideways until hitting the empty bleachers at about 50 mph. For climbers — or any activity involving a perilous location and focused technical skillsets - the distraction of an unexpected drone or its failure and subsequent uncontrollability are hazards that are easily preventable.

One aspect I did not hear in comments or discussions is age-related decision making and perceptions of the world. There are no FAA requirements for a 13 year old certified Recreational UAS Pilot to have adult supervision; neither is there such a requirement for a 16 year old Part 107 pilot. We have general aviation private pilots failing to follow required preflight preparation and planning, succumbing to cognitive biases and exercising poor aeronautical decision making. The exhilaration of UAS operations overrides similar considerations in some adult operators and will be even a more influential factor in adolescents.

Most of the public do not visit the state parks or ocean to be overwhelmed by noise or visual intrusions. The documented well-being and rejuvenation that can arise from time in natural settings seem dependent on awe, gratitude and escape from manmade noise. Oregon's park system has done an admirable job of trying to separate group camping and recreational events from single family or visitor environments. On beaches, it has been the expanses that offer separation from groups, dogs, and human generated noise. UAS brings a very different consideration into the mix to provide those separation opportunities.

Mentioned in public comments was a request for protection of UAS operators from harassment by someone opposed to UAS operations either to a specific flight or globally. If OPRD decides to address this potential, it must be a bilateral opportunity with a park visitor having the same access and prerogative to file a complaint for "harassment" by intrusion or noise by the UAV operator.

In my personal experiences in the parks over the past 45 years, most visitors have been considerate, especially in campgrounds where noise limits and dog control expectations are well established. Some even pick up trash and debris, particularly along the beach or trails. Some do not. I suspect UAS operations will bring the same variety of mindsets.

My takeaways

- > Prohibit UAS operations within campground areas and parks that are primarily campgrounds.
- Prohibit UAS operations over and near established picnic areas unless the area is separated and utilized by a group accepting responsibility for UAS in that area.
- > In designated take off and landing (TO&L) zones, restrict moving vehicles and persons not involved in the operation
- Any protocols for handling altercations related to UAS appropriateness, unless it involves a safety issue, must be designed for both viewpoints. An operator making poor decisions has to be accountable.

Airspace Intrusion – Emergency Operations

In recent years there was a significant wildfire close to the western part of Bend, OR. A sixteen year old with a very expensive UAV flew his aircraft into the fire zone to take photographs. His operations interfered with the spotter plane leading tankers in for low pass retardant drops, resulting in aborted runs and temporary cessation of air support. Fortunately, there was no mid-air collision.

Despite the potential usefulness of UAS in search and rescue missions and patrols, it seems wise to have an agreement in the park regulations for UAS operators to cease all flights by returning to "base" in areas where emergency air operations are being conducted. For local UAS pilots who are part of a CBO or CERTS that actively participate in SAR, there could be exceptions.

My takeaways

- Require all UAS operations cease and UAVs expediently landed if emergency operations are conducted in the area
- Allow for the possibility that emergency units may seek the help of a UAS operator if needed
- > The regional Flight Standards District Office in Seattle may be of help with conflicts

Final thoughts

Our local 40+ land use planning process began with policies clearly stating the intentions behind them; ordinance language initially was relatively flexible. It did not take long, however, to learn that unless something was specifically prohibited in an ordinance, land use lawyers argued that it was "allowed". It is admirable that OPRD has tried to take a balanced and inviting approach to UAS regulations within the system. You have made a prudent safety and intrusion prevention provision in prohibiting UAS in campgrounds; however, leaving everything else open, at least in concept, even with designated take off and landing areas, makes that UAS use cumbersome and difficult to reverse. First are your stated Oregon public process requirements for each reconsideration; second, irrespective of the rationale we are more prone to classify something taken away as a loss (or "government" intrusion) than if we did not have it to begin with. It would seem that you have enough readily available information about sensitive areas for both wildlife and humans and some tools in the FAA NAS altitude restrictions to at least establish preliminary restricted areas until adequate vetting. You could even set a decision date certain if you wished.

Mr. Sugahara spoke on *Think Out Loud* about a Tennessee park that designated a section for UAS use and noted that "no one flew there" because it did not contain anything "interesting". His narrative actually adds validity to the conundrum you know you face – people want to operate UAS in the very spaces that visitors want to be for scenery, wildlife and habitat. While I can appreciate his advocacy, he has a significant vested interest in promoting permissive rulemaking. UAS regulations are evolving. The technological innovations touted as tools for identifying problematic UAS operators do not yet exist and will not be a required retrofit for existing UAV until late 2023, if then. Neither do the authorizations for CBOs which will allow local flying regulations specific for the sensitivities of a locality. This interim is the very time period where the park system will need the most help. Once that equipment and FAA regulatory support is in place, a larger freedom for UAS use would be more practical and desirable. You have a larger stewardship mission than to embrace every new technology or recreational pursuit, especially if you are unable to sustain park and shore integrity, safety, habitat and wildlife because of evolving corrections of equipment and compliance issues or limitations imposed on your ability to fulfill that mission with locality specific regulations.

Personally, I have experienced the intrusion potential accompanying UAS use. I also recognize it is part of our current social constructs and has many beneficial attributes, including recreation. Like most of what we have to do as human populations grow, our success will depends on finding that balance between our awareness of our impacts on our environments and inhabitants and a commitment to temper some of our impulses and wishes in favor of a larger community. And that perspective is not one that is easily created by regulations.

Thank you for the opportunity to comment.

Jim Powell Bend, Oregon jhp@bendbroadband.com

837.385 Preemption by local laws regulating unmanned aircraft systems.

Except as expressly authorized by state statute, the authority to regulate the ownership or operation of unmanned aircraft systems is vested solely in the Legislative Assembly. Except as expressly authorized by state statute, a local government, as defined ORS 174.116, may not enact an ordinance or resolution that regulates the ownership or operation of unmanned aircraft systems or otherwise engage in the regulation of the ownership or operation of unmanned aircraft systems.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Public comment:

I am elated to hear the discussion on proposed rules for Unmanned Aerial Systems (UAS/Drone) in Oregon State Parks. I'm an FAA licensed, Part 107, UAS pilot and have enjoyed being able to fly in and around our beautiful state. I believe our State Parks have so much to offer, to all visitors, and granting pilots freedoms instead of restrictions is a much wiser plan for regulating a rapidly growing industry and hobby. I think one of the most important things for those who are not drone operators, is to have a conversation with someone who is. By allowing more access to drone operators, more people will have experience around them. Not necessarily behind the controls, but merely in the presence of them. This exposure will give a better understanding of UAS operations and the amazing capabilities they have. Allowing professional and hobbyist pilots to enjoy state parks and educate the public on UAS platforms is a much better approach, than to restrict their access and continually have other patrons of the park fearful of otherwise safe and fun equipment.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Duke Shepard

dukeshepard@hotmail.com

Public comment:

All recreational drones should be banned from state parks.

Drones should be only allowed by permit for 1) scientific research 2) limited instances of videography (movies, tv shows, tourism promotion). the number of permits should should be capped, limited, and expensive.

Camping at Wallowa Lake with constant drone flight overhead was absolutely disruptive and not appropriate. Allowing them invites conflict. If I'd had a gun, I'd have shot one down. Ban them.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Tina Blackman

orgnizcoch@aol.com

Public comment:

We stand in support of Oregon allowing take off and landing of drones in the state parks. We love flying in our local state parks as it allows us to take in the beauty of the area, most of which is preserved via the state park system. We are respectful of others and respectful of the area, ensuring not to be a nuisance to any others around. I would hate to see this rule changed as it would eliminate so many's ability to experience the world from an aerial viewpoint. I recommend the Oregon state park system to continue in support of the take off and landing of drones in the state park system. Thank you!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

David Kraft

dkraft@whatsinthere.com

Public comment:

I'm 55 and have been professionally operating drones for 7 years.

Of course there are detractors to the drone issue but they seem to be stating dreaded behavior without evidence.

Please consider https://dronedj.com/2020/12/17/drone-pilot-fined-182000/ as evidence that the FAA is already enforcing poor behavior. Drone activities are closely recorded unlike many other activities which threaten our wildlife.

The positive observations from birds-eye view FAR outweigh the violators which are easily caught. FAA regulations are already in place concerning wildlife intrusions, ground annoyances and problematic individuals.

Banning Drone flights would be a shame on government oversight.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

carol somers

carol_somers@hotmail.com

Public comment:

Grateful for the opportunity to submit my comment on drone topic. My personal experience with "recreational" use of drones has been one o serious annoyance and concern or my own and the public's privacy.

I have had drones fly over my private backyard area at least 3 or our times- a space I generally count on for personal visual privacy. When I have tried to determine where they are coming rom or who might be lying one over my space- I come up with no answers. It feels like a real violation. In addition- when I have been paddle-boarding on Elk Lake, or recreating on an Oregon beach, and several other public areas and parks- I have had drones fly over and hover around me and it is kind of scary- wondering what people do with the footage they capture.

Drones do not feel like they should be a "hobby-toy" for the general public to play with considering the extent to which they have the capability to invade and interrupt personal privacy. I believe as the technology continues to "improve" and they get smaller and quieter- it is more than a modern-day nuisance- but a serious threat to personal safety as well if "in the wrong hands".

I feel that drones in general should be for public safety use only by designated officials and organizations, and if allocated for public use- landing and take-o zones should be seriously limited to non-residential or highly publicly used areas. this is a very general personal appeal, and of course only takes into consideration my own personal experience- nothing to say of potential wildlife disturbance.

Thank you or considering the essential meaning of my comment.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Lyn Milam mystjm@Aol.com

Public comment:

Our family has been enjoying the use of quadcopters, usually what most people think of when you say "drone", for some time and find them to useful in many ways. Please allow the use of drones as the rule, but give the local ranger the ability to set enforceable guidelines, only if required, to address a specific need in a defined location. Let's avoid blanket rules. They usually are more harmful than good.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

John Woike

jwoike13@me.com

Public comment:

I would like to thank the OPRD for writing a fair and balanced proposal to allow the take-off and landing of drones in your state parks. As a Part 107 FAA Certified drone operator I support the recommended changes to make it more accessible for commercial and recreational hobbyist to enjoy the natural beauty of the state parks and ocean areas except for areas that will be clearly marked as prohibited zones.

With the growing popularity of drones as a hobby and commercial operations it is great to see an agency looking to be "drone friendly" while also considering the general public and animal habitat. As a pilot that enjoys but the commercial and hobby side of the drone industry I can appreciate your willingness to work with all stakeholders in the fair usage of Oregon's state park system and ocean and beach areas.

I look forward to seeing this proposal pass as written so that I may use it to approach the state agencies in my state of CT to allow for a more fair and accessible rule for the "take-off and landing" of drones.

Regards,

John Woike Owner/Operator - Samara Media, LLC



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Bill Milam

Milambrm@yahoo.com

Public comment:

It is fitting that we should all be concerned over the use of our public parks. They must be preserved, but also allow people with different interests to enjoy them. I believe that reasonable rules for "drones" can be established IF they are determined by the local authorities to be needed for a specific issue. A blanket banning of FPV aircraft such as quadcopters is not a just law. Please always begin with less regulation first. Relaxation of an ill conceived rule, even if justified, will likely never happen and sets a precedent that will be hard to overcome. As a rule, drones should be allowed. Simple, smart, reasonable operation guides, not bans, can help to make it so everyone's interests will be served.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Tyler Dobbs

Public comment:

Take-off and landing of drones/model aircraft

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

tylerd@modelaircraft.org

The Academy of Model Aeronautics (AMA) is writing in support the OPRD proposed drone rules, which would provide clarity for drone pilots, hobbyists and the general public to know where drone and model aircraft take-off and landing is allowed and prohibited within a state park and along the ocean shore. Please see attached letter of support.



April 7, 2022

Oregon Parks and Recreation Department 725 Summer St NE, Suite C Salem OR 97301

RE: Support of OPRD proposed rules allowing drones/model aircraft to fly from safe locations

Dear Oregon Parks and Recreation Department,

The Academy of Model Aeronautics (AMA) is writing in support of the OPRD proposed drone rules. These rules would provide clarity for drone pilots, hobbyists, and the general public to know where drone and model aircraft take-off and landing is allowed and prohibited within a state park and along the ocean shore. AMA is a nationwide, community-based organization of 180,000 model aviation enthusiasts, with over 3,000 members living in Oregon. For more than 85 years, AMA has successfully managed the recreational UAS community by providing robust safety guidelines and training programs. All AMA members follow this strict safety program and have the benefit of a \$2.5 million liability insurance policy that comes with membership. AMA members know where and how to fly responsibly and have a strong safety record.

AMA appreciates the time and effort put forth by OPRD and the drone advisory group to ensure the safety of our environment, wildlife, and citizens of Oregon. We look forward to supporting OPRD by providing recreational UAS operators with the programming to ensure the safety of both humans and wildlife.

On behalf of our community, AMA thanks you for your support and looks forward to the passage of these new rules.

Respectfully,

Tyler Dobbs

Senior Director of Government Affairs

Academy of Model Aeronautics

tylerd@modelaircaft.org

(765)287-1256 ext. 235



Date comment received:

Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Erik Veith gr8audio@gmail.com

Public comment:

I am in support of allowing UAS operation/Takeoff and landing within state park parks and along the ocean shore. I find it concerning that there are those who believe that Park Managers could be relegated to accept the responsibility of said operations and in lew of allowing such operations UAS take off and landing within these park areas would essentially be banned.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Marsha Buono

mjnbuono@comcast.net

Public comment:

I am against any recreational drone use in Oregon State Parks, at the beach and all parks in Oregon. Wildlife is a precious resource for our state, we should protect it.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Gregory Brunette gregbru@msn.com

Public comment:

I oppose rules allowing the general use (take-off and landing) of drones in State of Oregon Parks. Exceptions for scientific research, law enforcement, or other special, one-time use should be on a permit basis.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Elizabeth Bragg

etbragg@gmail.com

Public comment:

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank You,

Elizabeth Bragg West Linn, OR



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Mercedes McCreight

Public comment:

Hello Oregon State Parks,

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

mercedes@mccreight.com

Thank you for providing me with the opportunity to comment on the topic of drone usage near state parks & beaches. It is an important issue & the growing popularity of drones has increased the need for rules & regulations to ensure public safety & maintain healthy ecosystems.

I feel strongly that we should be protecting birds (especially sensitive nesting sites) from drone interference. There have been many documented cases of nesting sites & eggs/chicks being abandoned by their parents when spooked by drones flying too close. These drones can resemble predatory birds, & disturb some of the few natural areas that are left & suitable for nesting habitats. Bird populations have declined sharply over the past few decades, & we should be doing what we can to try & prevent more unnecessary losses.

Over a million seabirds and shorebirds nest along Oregon's coastline every year including many endangered species. Putting regulations & rules in place about drone usage would help protect many valuable species who not only ensure continued biodiversity, but also bring money into our state & coastal town economies due to tourism. Last summer, I visited Cannon Beach & saw the tufted puffin colony nesting on Haystack Rock. It was an awe-inspiring & memorable experience, & I'd like to protect sites like this for future generations to enjoy & appreciate.

Birds that nest in large, communal sites (such as shore birds, like puffins) are especially vulnerable & their options for finding alternative nesting areas after being spooked away from their primary sites by drones is limited due to habitat loss & development. One such incident caused thousands of nests to be abandoned & it serves as an example of how serious this seemingly trivial issue can be. https://www.audubon.org/news/a-drone-crash-caused-thousands-elegant-terns-abandon-theirnests Drone use is already prohibited at national wildlife refuges due to the risks to wildlife, & these protections should be extended to other sensitive natural areas. The U.S. Fish & Wildlife Service cares about this issue too & knows how important it is:

https://www.fws.gov/story/keeping-wildlife-safe-drones Unregulated drone use near state parks & beaches also creates unnecessary dangers & disturbances for visitors & tourists, as well as marine mammals. As an Oregonian, I enjoy traveling to our beaches & spending time in coastal towns. The idea of being bothered or hit by drones while trying to enjoy the outdoors is less than appealing.

Below, I've listed recommendations put together by the Audubon Society of Portland. I support these

suggestions & hope you consider adopting these into practice:

- All state parks and beaches be closed to drone take-off and landings except where they can be safely allowed
- State Parks should determine where to allow drones based on the best available science
- State Parks should create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts.
- While designated areas are being determined, status quo drone use would continue (i.e. this would not ban all drone use at any time during the process)
- State Parks should include a final map(s) of designated drone take-off and landing locations on their website
- In areas that are approved for drone use, include in the rules:
- No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.
- •All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time.
- State Parks should include strong enforcement mechanisms in final rules

Thank you for your time,

Mercedes McCreight
Portland OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Dan Rohlf

danrohlf@gmail.com

Public comment:

On numerous occasions my enjoyment of the outdoors has been disrupted by the noise and annoying movement of drones. I go to the beach and parks to enjoy nature, not to have to confront some of the very technology I get outdoors to escape.

Therefore, I encourage Oregon State Parks to close State Parks and the ocean shore to drone use unless a parks unit specifically decides to permit such use in a designated drone take-off and landing area.

If the parks department does decide to make exceptions to a general ban on drone use in parks and seashores, I encourage formation of a committee to consider appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thanks, Dan Rohlf



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Vicki Graham

grahamv@morris.umn.edu

Public comment:

To Oregon Parks and Recreation Department,

Thank you for providing this opportunity for comments on proposed regulations for drone use in State Parks and coastal areas. I was recently buzzed by a drone while I was walking on the beach at Battle Rock, in Port Orford. It came up behind me, flying very low and very fast and scared me badly. I can imagine the terror a nesting bird or a hauled out seal would experience if this happened to them.

Therefore, I am requesting that drone use regulations be oriented toward preserving peaceful experiences for those who want to explore Oregon's natural places and to recreate safely. I am also requesting that these regulations be formulated to best protect nesting birds, marine mammals, and other wildlife from drone disturbances, which have been increasing on Oregon's coast.

Rather than selecting specific areas where drone use is restricted, the regulations should go in the opposite direction and restrict drone use in ALL areas of parks and coastal areas except in specially designated places where neither wildlife nor humans will be impacted. I recommend that all state parks and beaches be closed to drone take-off and landings except where they can be safely allowed, and that State Parks convene an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts. In areas that are approved for drone use, users should need to follow rules to protect wildlife: No drone take-offs or landings to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas. Drone take-offs and landings should be discontinued if repeated wildlife disturbance events occur in the same location. All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time. State Parks should include strong enforcement mechanisms in final rules.

Oregon's state parks are popular destinations, and with visitation slated to increase, we need for OPRD to be proactive now about balancing responsible drone use with exceptional visitor experiences and minimizing wildlife disturbances into the future.

Thank you for your attention.

Sincerely, Vicki Graham

Port Orford, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Paul and Dawn Trimble

tpaultrimble@comcast.net

Public comment:

Drones are a danger to bird nesting sites, especially along the coast. The state would be hypocritical to allow drones to get close to nesting sites while at the same time trying to save endangered species like the Western Snowy Plover and the spotted owl.

Plus, the drones destroy the peaceful sensation people desire to achieve when going to parks.

Thank you, Paul & Dawn Trimble



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

T Trudgeon

tombtrudgeon@gmail.com

Public comment:

Hello,

I am an Oregon resident, and I have had multiple unpleasant experiences with drones in natural areas including two that were on the Oregon coast.

The first was when I was bird watching, and a drone disturbed the peace of the birds I was viewing, making them fly away and/or behave in ways they otherwise would not have behaved; flight fight or freeze behaviors.

The second was more personal, I was running on the beach and I could hear a drone follow me above for what felt like an unusual and uncomfortable amount of time. It reduced my enjoyment of the natural area significantly and it gave me have an uncomfortable sense of being under surveillance.

Overall I find drones disturbing, unnecessary as a recreational hobby-like tool, sonically very unpleasant and distracting, and potentially harmful to natural areas and animals. Therefore:

- I want to Thank State Parks for providing this opportunity
- I Recommend all state parks and beaches be closed to drone take-off and landings except where they can be safely allowed
- State Parks should determine where to allow drones based on the best available science
- State Parks should create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts.
- While designated areas are being determined, status quo drone use would continue (i.e. this would not ban all drone use at any time during the process)
- State Parks should include a final map(s) of designated drone take-off and landing locations on their website
- In areas that are approved for drone use, include in the rules:
- No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.
- All areas should be periodically reviewed for inclusion or removal as designated drone take-off

and landing areas based on the best available science as wildlife usage and other factors can change over time.

• State Parks should include strong enforcement mechanisms in final rules

T. Trudgeon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Nancy Kurkinen

nak242@comcast.net

Public comment:

Oh, please, take action to keep drones out of the skies over our state parks and beaches. Let them be natural places for birds and humans.

Nancy Kurkinen

Portland OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Mary Rose Navarro

mrosenavarro@gmail.com

Public comment:

Hello,

I'm writing to urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you, Mary Rose Navarro Portland



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Deb and Bob Atiyeh

debatiyeh@yahoo.com

Public comment:

Thank you for providing us the opportunity to comment on the proposed Drone Take-Off and Landing Rules. We live in Cannon Beach and often see drones being flown by people without any regard for wildlife and nesting birds.

Please close all state parks and beaches to drone take-off and landings. If you fail initiate an all-out ban, then at a minimum, State Parks should determine where to allow drones based on the best available science; create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts; and include a final map(s) of designated drone take-off and landing locations on their website(s).

If any areas are approved for drone use, please include these guidelines in the final rules:

- o No drone take-offs or landings may occur within 100m of any observed birds and/or known nesting locations; from seal haul out and pupping areas or near any land based wildlife.
- o Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.

All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors change over time.

Finally, rules are worthless without enforcement. Please include strong enforcement mechanisms in the final rules and fund the program by issuing fines.

We also support designating Ecola Point and Chapman Point as Marine Conservation Areas; to help protect our North Coast Rocky Habitat with their vulnerable and endangered sea life from the overwhelming increase in visitors coming to our coastal areas. Ecola Point and Chapman Point are among the most beautiful areas on the West Coast and we must protect what is sacred.

Thank you for considering our comments,

Deb and Bob Atiyeh Cannon Beach, Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Camille

c.rushanaedy@gmail.com

Public comment:

Hello,

My name is Camille Rushanaedy. I was born and raised in Oregon and currently reside in Portland, OR. I wanted to provide a comment to the State Parks Department regarding the use of drones along the Oregon coast and at state parks.

I have seen drone use increase dramatically in state parks and at the beach over the past decade. More recently, I have seen a few incidents of drone operation disturbing native nesting birds. As a resident and someone who regularly enjoys Oregon's beautiful state parks and coastline, I would like to recommend that all state parks and beaches be closed to the take off and landing of drones, unless State Parks determines that take off and landing will have minimal impact on endemic animal communities based on current scientific research and allows drone use in specified areas only.

I believe that any approved areas of drone use include the conditions:

- No take-offs or landing within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- Drone take-off and landings must be discontinued if repeated wildlife disturbance events occur in the same location.
- Strong enforcement mechanisms with fines for breaches of the final rules.

Thank you for allowing the public to comment on the use of drones in our state parks and thank you for your consideration.

Best,

Camille



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Tara

tara.lemezis@gmail.com

Public comment:

To Whom It May Concern:

I urge Oregon State Parks to please close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you for your time and consideration, Tara



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Lee Garrett leegarrett2@gmail.com

Public comment:

Please do not permit drones in parks except by state-authorized personnel. They are a hazard to all, particularly to avian life.

Thank you, Lee Garrett Portland



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Pat Ormsbee

pcormsbee@gmail.com

Public comment:

I support the prohibition of drone take-off and landing zones from all beaches of the Oregon coast, and all Oregon State Parks except in very limited controlled use areas to reduce potential impacts to wildlife. In response to "OAR 736-010-0055 that states park visitors may not harass, disturb, pursue, or injure wildlife", I recommend including direction for each state park to assess impacts and develop a plan to prevent wildlife associated take-off/landing, and fly over disturbance by drones. Such an assessment would address all wildlife species and their habitats susceptible to drone activity including bird nesting areas or wildlife denning/pupping areas. The assessment would be the basis for developing a management, education, and monitoring plan specific to each park. Implementing clear, visible signage, thorough public education, and strict enforcement is also critical to effective wildlife protection.

Sincerely, Pat Ormsbee

Eugene, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

John Hamburg

jhamburg97477@hotmail.com

Public comment:

I support the prohibition of drone take-off and landing zones from all beaches of the Oregon coast, and all Oregon State Parks except in very limited areas that avoid the possibility of operation in/over bird nesting areas or seal pupping areas. Provision for signage, public education, and strict enforcement should be made.

Thank you. John Hamburg Eugene, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Isaac Pettit

ipettit@cedarville.edu

Public comment:

Drones have been such a critical part of expanding on the creativity of my life and many others. As a hobbyist and now professional drone pilot, drones have been the key part to connecting me with nature and encouraging me to go outdoors. It'd be a shame to see that stifled for so many people who would want to explore and show off the beautiful state parks Oregon has to offer. A park manager who wants to get people to connect with nature in their own way and attract traffic and tourism through aerial media shouldn't have to go out of their way filling extra paper work to make that happen. Not when it's such a normal part of so many people's every day life. Hopefully Oregon will remain an ally to those looking to experience and share nature through aerial systems.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Ms. Bea Haven

ms b have n@yahoo.com

Public comment:

I hate drones and they should not be allowed in state parks unless used by biologists/scientists for specific reasons. They are unsightly and noisy nuisance and if I am at the coast or in a state park I am there to get away from the city and technological gadgetry.

I in no way want to be bothered by the sight or sound of a drone ever but I understand that they may be helpful to study certain aspects of the environment by trained personnel.

I know I am not the only one who feels this way and just heard about this on OPB this morning. Time is running out for public comment and I am sure there are many people who have no idea that this is even happening and would love to comment on how much they hate drones.

\\\=^..^=//// You can't be a smart cookie with a crummy attitude.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Saldivar

mark@realmarkdb.com

Public comment:

I am Pro Drone Landing and Taking off in Parks.

I do not think it should be limited to certain locations except that the public safety be considered by pilots.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Dale Marion

dkmarion@gmail.com

Public comment:

I'm very pleased that Oregon is taking the lead to support the hobby of drones and facilitating their ability to capture the natural beauty of our state parks.

This hobby is a great introduction for our children to learn about electronics, optics, radio control, aerodynamics, photography etc.. And support Oregons high tech economy.

I believe it would be a mistake to deny our extremely limit this exposure to our young people.

I understand the concern that drones will take over the parks. This has simply not happen in the places they are now allowed.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Krall

michaelkrall670@gmail.com

Public comment:

Snowy Plover nesting areas (four known areas on the Oregon Coast) are especially vulnerable. Other nesting birds including Black Oystercatchers, three species of Cormorants, Common Murres and Pigeon Guillemots are also vulnerable and will be disturbed by drones. Drones also impact privacy of property owners and serenity of natural environments. Please exclude them from state parks and sensitive natural areas.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Judith Ramaley

jaramaley@gmail.com

Public comment:

I am concerned about the impact of drones on wildlife within our Oregon State Parks as well as in the many people who visit our parts. I am writing to request that the Oregon State Parks restrict drone use to designated drone take-off and landing areas and that a technical committee be appointed to develop criteria for designated drone sites.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Karyn Gibbs Gibson

karyn.gibson@gmail.com

Public comment:

I don't think I'll ever forget the lovely--if busy--hike along the McKenzie River that culminated with a visit to Blue Pool... Where I found a teenager, with his family, flying a drone around and terrorizing the waterfowl at the pool until the three pairs of ducks left and no other birds were noticable despite the presence of dippers and other stream living birds elsewhere on the trail in spite of all the people on foot or on bikes.

Drones are admittedly cool and take incredibly cool shots, but the proliferation of drones in Oregon's Wildlands degrades these spaces, both for other users and the wildlife, and should be restricted, especially during delicate seasons like migration and nesting seasons.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Lynn Herring

lynnhe@outlook.com

Public comment:

To Oregon State Parks,

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas.

Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Sincerely,

Lynn Herring



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Roberta Jortner

robertajortner@gmail.com

Public comment:

Greetings,

I am concerned about the impact of drone use on birds and other wildlife, and on people too. I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas.

Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our state parks and natural areas.

Best.

Roberta Jortner Portland, Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Thursday, April 7, 2022

Date comment received:

Commenter name (if provided):

Commenter email (if provided):

Mike Shrader

mkshrader1@gmail.com

Public comment:

Don't believe drones be allowed in our state parks period! Most visitors go there to enjoy nature on her terms, get away from man made noises & human made distractions. Last thing want, to take away this important human experience is noisy & unnecessary use of drones for public use. There are plenty other public places to use same, ie. BLM, Forest Service lands. Besides will greatly impact all kinds of wildlife, besides birds, lead increase harassment. Already don't have enough rangers to enforce all other things suppose to do. le. dogs running off leash, biting people, excessive barking, ect. If going to allow, only where presently allow off road vehicles only along coast, with necessary restrictions for bird, other animal breeding seasons. This keeps these noisy visitor uses together & away from other park areas to insure peace & quiet, & allow hear observe nature's sounds only!



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Stephen Ott

Public comment:

April 6, 2022

Hello OPRD Commission,

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

smjott@aol.com

I am opposed to recreational drones in any of our State Parks, especially along the coast. The beaches are a place for personal rejuvenation and reflection while enjoying the fresh air and the sights and smells of the beaches, and the sounds of the surf and the birds. Drones are intrusive, and can easily compromise beachwalker privacy. Lets keep our beaches and woods places where Nature is close and available. These sacred places are not runways for toys, nor backdrops for aerial video's. Protect the beaches and woods, please don't exploit them!

Thank you,

Stephen Ott Milwaukie, Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Jennifer

jimbojonm@hotmail.com

Public comment:

I am listening to the OPB story and want to note we have been at Willamette Mission State Park and was harassed by someone and their drown. Maybe just like an off leash dog area, maybe there can be a drone area, but when wanting to walk in a park setting having some guy fly his drone over your head and follow you, it is rude and annoying and disrespectful and unkind. If folks were not so rude maybe there would be o need to implement rules.

Thank you for hearing my concerns,

Jennifer



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Amanda Corey

stewart.amanda.marie@gmail.com

Public comment:

No drone use along the coastline. Disrupts people and wildlife alike. The tourists want to make fancy videos and it disturbs countless wildlife.

Amanda Corey



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Sev Leonard

Public comment:

Hello!

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

severin.rea@gmail.com

I appreciate the opportunity to comment on regulating drone use in Oregon State Parks.

A few years ago my family and I hiked into the Tamolitch Blue Pool. While we were admiring the view, I heard a buzzing noise overhead and looked up to see a drone. There was a duck swimming in the pool below, and the drone operator proceeded to buzz the duck with his drone. It was frustrating for us and incredibly disturbing to the wildlife. Nothing breaks me out of enjoying nature quite like the buzz of a drone, that for all I know is taking a video of myself and my family.

I would recommend that state parks and beaches be closed to drone take off and landings, using science to determine where drones should be allowed. If wildlife is repeatedly disturbed then an area should be deemed off limits for drone operation.

I am especially concerned about the impacts of drones on coastal wildlife, and the enforcement of drone rules and regulations. I feel that strict enforcement must be part of the drone regulation plan, as without enforcement I am sure drone operators would continue to fly wherever they please.

Thanks Sev Leonard



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Ethel Snakes

ethelsnakes@gmail.com

Public comment:

Thank you for opening this up for public comments regarding changes to the regulations for drones in the State Parks. The current regulations seem like a reasonable balance between protecting sensitive wildlife areas and allowing responsible drone operators to enjoy recreation. Unfortunately, there are stupid drone operators who will ignore any regulations (new or existing) that make a bad name for all drone operators. These people are already in violation of existing FAA regulations and new restrictions will not change their behavior. Education and enforcement might.

From the previous comments, some people just don't like drones. If all the laws and regulations were based on what some people do not like, reality would be a dismal, sterile place. If the people who do not like drones would spend time looking at the images and videos they produce, maybe their attitude would change.

Many of the comments complain of the noise factor with drones. If that is really the problem, these people should be lobbying for regulations to keep snowmobiles, diesel pickup trucks, motorcycles, generators, personal watercraft, loud children, yippy little dogs and loud music out of the parks since all of these make much more noise than a drone.

I have flown my drone over flocks of birds on beaches and they totally ignore it. I never see how close I can get because an encounter between a bird and a drone would always result in the destruction of the drone. Flying around our property, I have had hummingbirds fly up close to the drone just to check it out.

Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Lin

hiketheworld2@gmail.com

Public comment:

Dear Oregon Parks and Recreation depart:

Thank you for the opportunity to comment on the use and restriction of drones along our Coast.

While I have not witnessed any drone use while living here in Newport, I have been volunteering in wildlife rehabilitation for over 20 years including 18 years here in Oregon at 3 different facilities, including rescue and transport of injured animals. Saying this, helps explains my desire to protect our wildlife and now more than ever we are experiencing increases in human contacts that harm them. With our present climate issues, we are losing too many species to extinction. Marine life protection is more important than ever.

I do not feel that drones for normal use are appropriate for State Parks and Reserves. This will probably become evident as drone use increases. Persons involved in rescue, research and professional photography may perhaps need to have special allowances with their permits. We do need to allow drone use for research and education which has been invaluable so far in learning and even for rescue of injured marine life.

Permits for others need to have more limitations along with more active monitoring and enforcement. Maybe to accomplish this there can be reporting of misuse by the public to an active phone line for more immediate enforcement. (Report of a dead or injured animal after a drone mishap is essentially useless)

Prohibiting drones in more areas seems best. We have 5 Marine Reserves in conjunction with protected marine areas, also existing State parks and numerous tide pools and nesting areas along our Coast to protect.

It goes without saying that your regulations will need prompt review and revision as problems arise to best protect our marine life.

Thank You. Lin



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Camelia Zollars

Public comment:

Hello,

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

camelia.verduzco@gmail.com

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

Thank you! Camelia Zollars



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Micah Meskel

mmeskel@gmail.com

Public comment:

I urge Oregon State Parks to close drone use in State Parks and the ocean shore unless otherwise indicated as designated drone take-off and landing areas. Please set up a technical committee to use the best available science to determine appropriate designated drone take-off and landing areas. This will help minimize wildlife disturbance impacts from drones and allow for peaceful and safe experiences for the many thousands of people that visit our iconic state parks and natural areas.

--

Micah Meskel Milwaukie, OR 97222



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Ivan McLean

ivan@ivanmclean.com

Public comment:

Let's please keep drones away from our parks and public lands. Ivan McLean Portland or



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Mike King

kandmking@gmail.com

Public comment:

Primarily for wildlife/habitat protection, recommend the following:

- Recommend all state parks and beaches use of drones be prohibited unless otherwise indicated as allowable or designated take-off and landing areas.
- Use a technical committee and best available science to determine appropriate designated drone take-off and landing areas
 Thank you,

Mike King



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Martha Goetsch

mfgoetsch@yahoo.com

Public comment:

To Oregon Parks & Rec.

I add my sentiments to those who have written to urge that safety of nesting and resting wildlife be given the highest priority when the rules for drones are determined.

Particularly, I understand that the parks can only stipulate where take-off and landing locations are and cannot specifically regulate the air above parks.

However, I would urge several things:

First, that licensure for drone operators require education about wildlife disturbance risks of drones and that amateur drone operators be required to obtain an FAA license for use of park land for drone use.

Second, that park staff be provided with whatever software can identify the owners of drones that are observed to be harassing wildlife so that they can be warned, educated or penalized for wildlife harassment. Such harassment breaks a law that is not specific to air space and drones, but enforcement of this law will require new measures to prove that a violation has occurred and track down the perpetrator.

Third, that rule-making consider restrictions based on certain noise levels and size of drones and that these be adjusted as the drone industry makes advances that make drones smaller and quieter.

The rules need to take into account the ignorance and naiveté of the excited new amateur drone owner by putting in place requirements for education.

Studies should help determine what reactions nesting birds have to what size drones. What size is perceived to be a threatening predator vs a puzzling big insect? The default rule should weigh wildlife protection over human recreation and be adjusted as verifiable information dictates.

Thank you for your careful consideration of public comments.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Martinez

zoo2112@comcast.net

Public comment:

I wanted to express my opinion against drones on the Oregon coast. I do not think it would safe for the nesting birds and intrinsic life along our beautiful coast! It is not safe for pilots who do not understand the different wind trials on an area like this. We need to keep our nature and wildlife areas free if intrusive technologies like drones! Privacy is also lost on these drones! Please vote against allowing drones flying, takeoffs , and landings on our Oregon Coast! Thanks Mark Martinez Portland Or



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

David Butz david.butz.jr@gmail.com

Public comment:

Drones are fun, safe, and educational. Drone hobbyists need safe remote areas to fly without being in trouble. No one wants drones in their neighborhoods or parks so we are always looking for remote areas to fly.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Rhysa Romstad rsolveigliz@gmail.com

Public comment:

Drones should not be allowed in state parks. For those of us who are hiking and enjoying the parks, the last thing we want to hear is a drone while we are enjoying nature. I'm out there to hear the sounds of nature, not yet another machine. They should be banned.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Dylan Pearson

Public comment:

to restrict drone operations in parks is the same as not allowing people to eat or play ect in parks. they are our parks and responsible flying only helps to spread information and beautiful photo's of the parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

David Teemsma

myheartspulse@gmail.com

Public comment:

Drones provide a way to experience the world in a way that for me has been something I have dreamt of my whole life.

They have been proven to be a safe form of flight for many years and are enjoyed by people of all ages.

They have enriched my life and given me a sense of purpose.

I hope that everyone is given the freedom to explore the world and see its beauty everywhere. Drones are a tool that enable us to do just that.

Please allow people to operate drones from the state parks and beaches. By doing so you will be enriching the lives of many passionate people.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Sean Davis

ANYONECANTRADE@COMCAST.NET

Public comment:

Each of us has a distinct difference in the use of parks. For some they enjoy mountain biking which has hazards and some have gears that can annoy both animals and humans. Horses are permitted in some parks, but they too can be hazardous to others as well as causing sanitary problems on the trails. All human activities have an impact on persons, wildlife and the environment. Drones are nothing more than the extension of photographers trying to capture the beauty in these areas. They are no more dangerous than bikes, horses or other human beings. Like all activities, we should expect a certain level of expertise, knowledge and safety from the operators. The drone community has such a regulated certification, licensing and monitoring process. It might be a viable solution to allow drone use as long as it complies with the FAA part 107 restrictions and guidelines.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Armon Vahidi

Public comment:

Hello.

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

armonster24@yahoo.com

I am writing you today in support of the proposed Ordnance to clarify drone safe zones within public parks. I believe that drones from both a hobbiest and STEM perspective is very important not only for peoples enjoyment but for the future of science and technology. With this in mind it is crucial that the Oregon government does what it can to provide opportunities and locations for aspiring drone pilots to learn and practice their craft. It is also a great opportunity to introduce the larger public to the advantages drones and hobby aviation has to offer.

Thank you for taking the time to read this comment



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Stephen Steckenrider

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

steck442001@yahoo.com

Public comment:

I would like to see drones be able to be flown in parks. Drones are a big part of stem learning and future job markets.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

John Cuppi

jcink2k@gmail.com

Public comment:

First, thank you for being supportive and welcoming of the drone hobby!

Drones are a recreational activity that is not only fun, but therapeutic for so many. State Parks are a nice place to enjoy this hobby. Some want to take pictures of the landscape, while others find an area of the state park and fly first person view / fpv drones.

I agree that areas such as campgrounds, crowded parking lots, and of course wildlife sensitive areas should be identified so that drone flyers can avoid them -- but we should of course be able to enjoy our hobby outside of those places.

Thank you again for proposing a balanced rule and keeping drones from being outright banned, or severely restrict drones in the parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Bryan Mayland

bmayland@capnbry.net

Public comment:

As a recreational drone pilot, I am excited to hear of the upcoming legislation to allow takeoff and landing of drones in Oregon state parks. The scenery of Oregon is stunning and drones provide a unique way to capture the beauty in a personal and memorable way. Being able to see it first hand from your own drone is like the difference between seeing a picture online and seeing it with your own eyes. When flying drones I also am approached by curious spectators and (pre-COVID at least) I am happy to share my spare pair of goggles to share in the experience, especially with children who are amazed and I feel inspired by the experience.

However, requiring that parks individually opt-in (instead of asking them to opt-out) creates an undue burden on each park to allow this form of recreation. I feel there will be very few aware of the rule, or willing to go out of their way to register. This creates a patchwork of can I / can't I fly instead of a broad selection of parks where flying is allowed, discourages citizens from attempting it, or worse flying where they are not supposed to solely by the park's omission from allowing it.

Please allow the legislation to proceed as opt-out instead of effectively doing nothing except creating red tape that parks will find easier to ignore, and thus exclude this remarkable form of recreation.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Casey Stavert

cstav7011@gmail.com

Public comment:

Small unmanned aerial systems provide a great opportunity for US citizens to express their first amendment rights and utilize upcoming future technology in new ways. The utilization of small unmanned aerial systems by the general public allows for our civilization to advance in new technologies at a rapid pace (evidence of this can be seen through history, for example, computer technology advanced slowly until computers became available in everyone's home). We cannot become more advanced and we cannot call ourselves a free country if the government dictates what people can and cannot do especially when what the people are doing is expressing themselves using new technology. Additionally, small unmanned aerial systems provide a fantastic educational opportunity for youth that are interested in sciences (engineering, biology, geology, geography). Sciences, might I add, that keep your parks alive and running.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Aaron Cousins

olyair4@gmail.com

Public comment:

Please keep drones out of our natural areas. National Parks, State Parks, NWRs, etc. These places deserve our protection and to remain as natural and wild as possible. The noise and safety concerns disrupts and destroys the enjoyment of these special places. I could understand a very limited permit system for photography or survey, but recreational use is unexceptionable. Thanks



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Jose Suarez

nitoes7@hotmail.com

Public comment:

Greetings

The initiative of "The Department of Parks and Recreation of Oregon (OPRD)" seems right to me and I unconditionally support this decision because by providing authorized spaces for the takeoff and landing of drones they are ensuring that there is no interference in sensitive areas of wildlife. On the other hand, they are offering the possibility of practicing this hobby, allowing the emotional stability of those who practice it. A round of applause for this initiative that could set the precedent not only in the nation but also worldwide for the coexistence between technology and nature. Full support and success.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Steve Pace

space1957@gmail.com

Public comment:

While I have not read through your proposed rules I do have my own ideas about access for drone users at our public parks and treasured landmarks.

I am a drone user that loves scenic vistas and aerial views of iconic landmarks. Drones allow people to capture these types of photos and videos that in the past required hiring very noisy and expensive manned aircraft which are considerably more obtrusive than a consumer drone.

I also am a nature lover and feel we need to respect the planet and the other creatures we share this planet with. For that reason I feel people should be restricted from disturbing nesting birds or pestering animals. This does not mean just drones! I mean those on foot, bicycles, or other modes of transportation that may cause a disruption to the wildlife.

Drones should be allowed the same access as any other visitor to the parks and landmarks. Therefore should be provided areas where launch and recovery can be accomplished in a safe manner away from where other visitors may be disturbed (although drones are considerably quieter than any manned aircraft within a mile when the drone is above 100' AGL). Even in wilderness areas drones could be used at altitudes between 300' and 400' AGL and not disturb wildlife (manned aircraft are only requested to maintain altitudes of 2000'+ in these areas).

Last point I would like to make is to reward the responsible drone user with practical access to your beautiful public properties and only punish those that do not have the respect to follow sensible rules to protect themselves and all around them. Please support responsible drone users as there are many of us and we disdain those that make black marks on our reputations.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Chris Johnson

cfelekos@gmail.com

Public comment:

Please allow drones to take off and land in state parks. This is a form of recreation, it can be done safely.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Dylan Douglas

Public comment:

Hello.

Date comment received:

Thursday, April 7, 2022

Commenter email (if provided):

dylannndouglass@gmail.com

I would just like to thank the State of Oregon for being pro-hobby and allowing drones to take-off and land within state parks. I cannot tell you how big of an impact flying drones has had on my life, as a hobby it has taught me so much about cinematography, hobby electronics, and been an extremely fun activity for me. However, were it not for parks, not everyone would have places near them that they can fly in a safe manner, and allowing people to take-off and land drones in parks is great; many more people can enjoy the hobby in a safe environment with plenty of space, as well as providing hobbyists a wonderful place to fly - I have to admit that the open and beautiful landscape of a park is absolutely incredible to fly in. Thank you for affording this opportunity to your citizens.

Dylan



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Tim Arp tarp2699@gmail.com

Public comment:

I support the taking off and landing of drones in the parks to be allowed. I understand there may be places that this should not be allowed. But I would like the default to be they are allowed unless there is a specific reason to restrict them.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Dan dan@fpvfc.org

Public comment:

I believe having a rule that states that take-off and landing of drones is allowed by default and only creating exceptions to this rule is the correct way to go and would set an excellent precedent for others to follow as well.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Neil Lee Neil.lee@leekainc.com

Public comment:

My name is Neil Lee,

I am currently a recreational FPV drone enthusiast. I am in support of the current written proposal for flying drones in State parks. It is a welcomed opportunity to be able to have a supportive and beautiful space to practice our skills in piloting and filming with drones for recreational purposes.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Craig Needelman jprinceton8@gmail.com

Public comment:

Most of us drone pilots are responsible and fly by the rules. The news shows you the rare incidence where someone does something illegal. Drones shoot a very wide angle image and aren't used for spying on people or property. Please allow us to use the park.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Christian Bonnette

Public comment:

As the drone and overall UAS communities continue to grow, it becomes more important for hobbiests to have more freedom when it comes to places to have fun and enjoy their hobby in a safe and responsible manner. All state parks should be open to drones.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Andrew Bingham

abingham35@hotmail.com

Public comment:

Parks are beautiful places and provided for the enjoyment of the people. People love to take photographs when in parks. Drones can take beautiful photographs. If people actually stop to ask for permission to launch drones to take photographs it will require a lot of resource. Will they also need to ask for permission to take photographs with their phones?

If the park needs data about drone usage they could just have each entrant answer a question upon entry. E.g. "will you use a drone in the part during your stay? Yes/no."

Oh, you said yes, here are is a copy of our rules and guidelines.

On the other hand, if drones are not permitted without approval (like fishing) the park could employ 10 additional people with drone catching equipment to catch all the violators.

Creating a restriction for takeoff and landing without permission seems to me like the park thinks people who are responsible need policing whereas truthfully it is only the irresponsible who need policing.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Public comment:

I believe that the current language of this rule is great. Drones are rapidly becoming a accepted form of recreation, in both videography and group flying events.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Joe Chovan

greenhawk@aol.com

Public comment:

I support the current wording which allows drones in public parks. This should be up to the discretion of the park manager, but NOT banned by default. I travel extensively on vacation with my radio control aircraft (model planes not "drones per se" but still classified as drones by FAA) and have noted national parks ruling which formerly prohibited flying as I have formerly done. This has caused me to cancel vactions to Oregon and other states. If this ruling is upheld I will resume my vacation activities.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Welch

mikewelch.com@gmail.com

Public comment:

As a frequent camper who has visited many state and national parks, I think that the state of Oregon has some of the best run parks in the nation. They are absolutely beautiful.

I'm also an avid photographer and drone owner. I think that Oregon should allow drones to be flown within their parks. It would allow many people to share fantastic images of Oregon's beautiful parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Tristan Ledlie

fourteendaystime@gmail.com

Public comment:

For the topic of public safety, it benefits no one if the drone were to crash, so pilots do their best to avoid it. If a drone were to crash into let's say a tree, at worst maybe a single foot of branches are removed from the end of a limb. For any who complain about noise, it takes maybe 2 minutes to go from just hearing it to hearing it well to barely hearing it again; it is not a major disturbance for long. In addition, most drones either are quiet and go high for long periods of time, or they are fast and loud, but usually cap out at maybe 5 minutes of flight.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Thomas Kirk

thomaskirkiii@gmail.com

Public comment:

As the hobby continues to expand, drone professionals and hobbyists are becoming more responsible to abiding by FAA rules and regulations. We understand the worriess and stress that our tools cause, which is why we are continuing to adapt to the ever changing rules and regulations. Furthermore, as a pilot, I can confidently say that drones are a phenomenal tool and can lead to remarkable discoveries. Said discoveries could potentially help wildlife or assist with search and rescue. Drones are a fantastic tool and the ever growing community simply wants to keep everyone safe and be good examples. Safety is key.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesThursday, April 7, 2022

Commenter name (if provided): Commenter email (if provided):

Jill Vander Hook barefootx2@zoho.com

Public comment:

I would like to see the drones use "DAY USE RECREATION AREAS" only. Having drones fly over the camp area would not sit well with campers as I suspect noise pollution is probably one of the top 5 reasons people camp...peace and quiet. Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Joseph Xavier

jjxdadsonbrounc76@gmail.com

Public comment:

Thank you Oregon! Glad to see common sense prevail. Drones/quads are fun way to enjoy one's surroundings and I am glad you recognize that. Hopefully other states will follow your lead and allow these in all state parks with no hurddles.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Lewis Thomas

homecolor2011@gmail.com

Public comment:

It's a great thing that your doing for the fast growing community of Drone hobbyist!! I'm from Florida & hopefully they can see what y'all are doing for the hobby and adopt the same plan,

Hopefully every state will adopt the policy and maybe in the future you can fly the Grand Canyon......lol and other state parks



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

S Pokorny

tenders.faceted_0n@icloud.com

Public comment:

Parks are supposed to be peaceful. Drones are very disruptive and create quite a lot of noise and distraction. Please do not allow them in parks



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Kinney

michaelakinney@gmail.com

Public comment:

This having defined for the parks would resolve a lot of "conflict" for folks that don't understand, that it is a hobby and recreation.

Defining a difference on "quadrocopter" that are for camera filing, vs "drone racing" should also be well defined. The later often do not have newer anti-collision logic, and can travel at higher speeds, which is the main concern for the shared public.

I have friends that do FPV-Drone racing, and they've always setup save boundry markers with cones. And do it late at night, to ensure low traffic.

But having these other classes defined would solve the e concern for "danger". I say to define this, not to bad that want to setup a "course" route, but to define these guidelines, so there is a consistent pattern of safety, that is also defined by the city or state as an ordinance.

Setting the framework will help reduce needless 911 calls, from "Karen's" that in there own right, want a safe park to enjoy as well, being fare.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Thursday, April 7, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert Knox

rwknox@ncsu.edu

Public comment:

We live in a country built on freedom. Freedom is only to be restricted when an action is a nuisance to others. In this sense, it is only rational that the default rule be to allow drones with the option to restrict them when/if they are a nuisance to others.

It is irrational and overly restrictive to default to a banned status, requiring citizens to petition for the freedom to partake in their hobby in a public space well suited for their hobby. The burden should be on you to prove drones are a problem rather than a burden on hobbyist to prove they are not a problem.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Commenter name (if provided):

Wednesday, April 6, 2022

Luis Munoz

Commenter email (if provided): oprd-oregon.gov@quadcopter.help

Public comment:

First of all, thanks to the OPRD for adopting a position that clearly supports the recreational use of Unmanned Aerial Vehicles, "drones" for short. It is refreshing to witness the production of a rule that considers the hobbies and interests of a growing fraction of the population. Rules that automatically allow take off and landing operations for drones, the parks will become a much more desirable destination.

Drones have increasingly powerful applications for photography, and facilitating its use within State Parks is a way to help people better enjoy the beautiful spaces that the parks offer along with their hobby. No doubt that park-goers will produce beautiful imagery that will further exalt the many landscapes available, perhaps helping to drive more visitors.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert Baggs

zbaggsz@yahoo.com

Public comment:

Hello I would like to thank the state of Oregon for supporting this wonderful hobby that changed my life for the better. Before I got into the drone hobby my life was not so good. But then I found the FPV drone hobby and it inspired me. I learned so much. I have something to look forward to everyday and I've meet the greatest people.

I would like the rule to stay written how it currently is. So more people can experience this great hobby and for it to change other people's life for the better like it did for me. Thanks.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Nathan Pulver

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

nathan.w.pulver@gmail.com

Public comment:

Changing the language of this law so that individual parks can ban take off and landing will simply end up with the ban of take off and landing in all but a few parks. Take California State parks as an example. The State parks website for them says take off and landing is permitted but park managers may make their own rules. Now, nearly all CA state parks have banned the take off and landing of drones if you look at information for the individual parks. Drones are a fantastic hobby that allow for amazing perspectives of natural systems. It would be a disservice to change the wording



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Roland Van Helden

rvanhelden1@gmail.com

Public comment:

How simple can it be. It's like driving your car. I can drive anywhere UNLESS there is a rule that tells me not to that.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Thomas Bones scottbones@gmail.com

Public comment:

There ought to be measures that control unreasonable disruptive actions.

However to enact blanket restrictions would unjustly prohibit the experience of drone operators. We have to remember that some of us like to experience our parks and natural areas in different ways, and we should all be allowed to do so.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Stacy ApRoberts sgaproberts@comcast.net

Public comment:

Please allow the general public points of launch and landing of drones. State parks, beaches. There's so much beauty. Let us enjoy it from land and air.

Try a few specific Days and locations. See how it goes? Maybe you'll need to permit this, maybe not. Buy an annual pass like we do for State Parks. Must carry at all times while flying?



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Tristan Sampley

tsampley27@outlook.com

Public comment:

Thank you for considering and supporting Oregon's drone hobbyist community. As a drone enthusiast, I can attest that it can complicated and difficult to figure out where to fly. Drones are a fantastic way to explore the natural beauty that Oregon has to offer and explore it from a new perspective. Flying drones is also a fantastic way to engage with a variety of STEM topics, and it does a lot to help prepare the hobby's youth for future STEM careers. The skills and technical knowledge that I have gained through flying drones has helped me immensely as a current mechanical engineering student.

I understand the leniency to move forward with this proposed rule. Drones do have the possibility to be intrusive and dangerous, especially when used improperly. All the drone pilots I have met have been excellent stewards of the land on which we are permitted to fly. Most recreational drone pilots are extremely familiar with the safety measures necessary for drone flight and are more than willing to help new pilots understand and practice these measures. They are also aware of the possible intrusiveness of drones and for that reason would benefit from having more open space to fly. Drone hobbyists do not want to intrude on others' privacy and tranquility and thus keep these in high consideration when choosing somewhere to fly. Most hobbyists respect these boundaries because they themselves share the same values.

Thank you again for being pro-hobby. This proposed rule is an investment in STEM and can only improve the stewardship of drone hobbyists. The drone hobbyist community is incredibly welcoming and supportive, and we appreciate the encouragement of such a fulfilling and educational hobby.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Wednesday, April 6, 2022

Date comment received:

Commenter name (if provided):

Thomas Richardson

Commenter email (if provided):

richardsonthomasa@gmail.com

Public comment:

Multirotor "drones" and R/C in general is a fun and enriching hobby that offers many pathways to learning about science and technology. I would personally like to thank the Oregon Parks and Recreation Department for giving their consideration to our hobby, with the hope that these new rules will help to normalize and de-stigmatize our hobby's presence in public spaces. Ever since I got involved in this hobby, I have found endless satisfaction in learning, designing, building and flying these amazing aircrafts. And after so much effort spent in the basement tuning, troubleshooting, finalizing, it is so rewarding to take my mini quad to a safe outdoor area and actually get it in the air! To see the outcome of my efforts realized by increased performance and efficiency since the last flight, or to learn a new maneuver or even just to explore the world from a new perspective is incredibly rewarding. Life already gives us so many constraints, so it is incredibly valuable to our hobby to have places where we can fly safely, without the added friction of unnecessary regulations.

Again, many thanks to the Oregon Parks and Recreation Department giving us their consideration. Cheers!



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Jared Wight

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

jaredrwight@gmail.com

Public comment:

Thank you so much for proposing this. I love piloting my drone and showcasing the beauty of nature. I hope my videos inspire others to get out too. I love flying. Thank you Thank you



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Corey Inman

lemondropunicorn@gmail.com

Public comment:

I think it's extremely important to clarify where we, as drone pilots can fly. I'm coming into the hobby as an Freestlye FPV pilot, primarily, and information on where I can't is pretty scarce on the state site. I would recommend making it easier to find such park rules, along with integrated county rules, for more centralized information, with the links to each county's site, keeping it decentralized. I would also recommend expanding the areas that we can fly, as well. Oregon has many beautiful areas and drones have been the first thing that have made me want to actually go and enjoy being outside and seeing those beautiful places, instead of playing video games all day.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Micah Wong

islandwanderermedia@gmail.com

Public comment:

Airspace should be a common and unrestricted space unless interfering with wild life. Drone use can be entrusted to the public with general public pressure and self regulation. Extra enforcement of airspace would bog down current systems, stiffle creativity, and result in unecessary beauracracy.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Greg Lightbourn

gregors861@gmail.com

Public comment:

Thank you for considering your public lands a multi use area to support many forms recreation. I have been building and flying FPV freestyle drones for over 5 years and love to fly in natural settings. I am completely in support of what is being proposed here and will definitely love to visit once the proposal becomes accepted!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Shawn Morrison

droplow777@gmail.com

Public comment:

I enjoy flying drones for recreation, and this change of the verbiage of the rule would make it nearly impossible to continue the hobby that I have enjoyed for years. This rule would make it illegal for me to fly my drones in parks, unless the park managers took extra time out of their busy schedule to write rules allowing drones and that would take a long time to do. Until that time, I would no longer be able to enjoy the recreational activity that brings joy to my life. Please leave the verbiage the way it is so that my friends and I can continue to do the activity that brings joy to our lives. Thanks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

L Bryant

Public comment:

Flying a drone is a fantastic hobby for beginners and experts alike. As a drone enthusiast myself I have come to realize that finding a place to practice and enjoy the hobby can be difficult, especially for those who may be under privileged and not have access to large open areas. State parks are utilized by many people for many different hobbies and recreations wether it's frisbee, barbecuing, fishing, biking or letting your dog play. An argument could be made to show hazards for any of these recreational activities if not done responsibly, drones are no different and should be treated the same way.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Ian Waldrop

01-forager.censor@icloud.com

Public comment:

As a responsible recreational fpv pilot, and licensed ham operator, I would strongly encourage the adoption of rules that allow take-off and landing by default. It's an exciting and safe hobby for all ages which is wholesome, promotes stem learning, and in-person social networking. Broadly limiting or impeding allowance of where these activities can occur will have detrimental knock-on effects. As a marine veteran of Iraq I can tell you that my tinkering and experimenting with technology as a child is what lead to my performance as the regimental information systems controller while we were deployed in fallujah. If you build it, they will come.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Andrew

Public comment:

I support allowing drones to takeoff, land, and fly in parks, as I believe flying remote-controlled planes and drones can be a positive thing that brings people together and allows them to have a fun hobby to enjoy. I also believe that flying hobby drones allows drones to keep advancing which improves other products, and things that happen to use the same technology such as devices with brushless motors, or lithium batteries improving their efficiency and performance as a side effect of the inovations in the hobby.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jeremy Leugers

jeremyleugers@gmail.com

Public comment:

I think that drones are a wonderful hobby and should have right of other recreational activities. I've been flying and building drones for about 5 years now and is a great hobby. We also use then for photography.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

David Tompkins

thedavidwtompkins@gmail.com

Public comment:

Yes this is great! I hope more states implement this rule. Way to go Oregon Parks and Recreation!!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert Kenyon

wholly@whollymindless.com

Public comment:

I commend Oregon's plan to default to freedom and liberty and the enjoyment of Oregon's beauty as the default position of the people's will. As we have seen with almost 10 years of multirotor/quadcopter flight it is neither a gross danger to the public nor an environmental disaster. Kites, balloons and all the other party going paper goods are easily more of a burden on the staff, people and beauty of Oregon.

Inspire the next generation of pilots, aviation and engineers by making flight accessible and common.

Please let common sense and "Free by default" be the benchmark by which all states are judged.

Thank you for your wisdom and leadership.

Robert Kenyon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

John Saginario

johnsag49@gmail.com

Public comment:

I really enjoy the community around drone flying, everyone is very respectful and fun. I support the proposed rule for allowing drone flying in a safe, respectful manner in state parks. Thank you to the Oregon Parks Department for considering such a forward-thinking rule!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Public comment:

Please, no drones in our public parks! Drones interfere with the beauty of unadulterated nature. I prefer the natural settings in our parks without having a buzzy drone come upon me unexpectedly, destroying my experience with a natural surrounding. There is a lot of potential for mis-use, e.g. cameras, which is an invasion of privacy. An alternative to a drone is a kite, which can be aesthetically pleasing, quiet and magical.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

jeffrey Kuczynski

Public comment:

Should be able to fly free just like America

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

voocodo23@gmail.com



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Jon Gaiser e-jon@hotmail.com

Public comment:

As a hobby enthusiast who is safety conscious, I am writing in support of allowing drones to be able to take off and land in state parks as the default permission (unless specifically disallowed). The drone community I have interacted with through MultiGP and AMA have all demonstrated responsibility when it comes to drone safety and having space to fly safely, like state parks, is critical to keep this hobby thriving.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Justin Humphreys

Lazurbeam@hotmail.com

Public comment:

I fly FPV racing drones. I've been doing it since 2017. These drones are not safe to have in parks. They may seem like toys but they're absolutely capable of killing someone. The drones that I fly go over 100 miles per hour. They're home built, and I've seen them fall out of the sky, failsafe over oceans, and full throttle into the ground a couple feet from a car and literally explode into pieces.

I'm saying this not only as a drone pilot but also as a father to 2 small kids. The very last thing I would like to see is someone that I don't know, and don't trust, to be flying 100 mph missiles around people.

I'm fine with photography drones flying, or smaller consumer grade drones. But fpv drones or hobby grade drones should not be near soft targets.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Ann Scott pflags1@gmail.com

Public comment:

I think the video and photos from drones are often lovely and they look like fun. BUT- sometimes you can't take a photo or bird watch without having a drone in the photo or just as one leaves a new one comes. Could drones be limited to the first 30min or every hour? Something that ensures some No drone time!



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

jrfisher5670@aol.com

Public comment:

I am a recreational drone pilot certified by the FAA. Collaboration and full transparency are critical components to developing rules that will impact the public. Thank you for allowing the public to have a voice in the development of this proposed rule.

This proposed rule strikes the right balance between supporting a growing industry and doing so in a way that does not materially impact the environment. Designating non-drone areas, as opposed to implementing a moratorium with few exceptions for take-off and landing, provides flexibility for drone operators to capture the beautiful scenery of the state, and, in other likely circumstances, capture data that can be used to benefit the environment and Oregon State Parks in general.

The importance of the OPRD's proposed rule cannot be overstated. Once a final rule is codified and published--for better or for worse--many state parks and agencies across the U.S. will look to Oregon's rule as an example for what drone take-off and landing rules should look like. This is a reality given that there are relatively few state park rules governing drones. While this legislation will impact Oregon state parks directly, the effects of this final rule will be wide-spread and will influence future rules for state parks located across the U.S. For this reason alone, it is important for Oregon to strike the right balance (which it does here).

While I commend the OPRD for not implementing a moratorium on drone use in public parks, I have noticed that many commentors feel strongly about implementing a moratorium. Motivations for moratoriums are likely fueled by concerns regarding disruption of personal enjoyment and recreation and/or disruption of wildlife. It is puzzling, and truly astonishing, that this bill has received many more comments suggesting a moratorium on drone use as compared to other bills I have seen which receive little public comment, but have a larger, more direct, and negative impacts on the environment and specific ecosystems across the U.S. This begs the question, why the outcry for drones? Unlike pollution and climate change--which are silent killers of the environment--drones are conspicuous and have little impact on the environment. I suppose it is easy to have a greater reaction and opinion about something that you can hear and see. While moratorium-seekers seem to care more about their experience today (enjoying a park without drones flying around), far less outcry is heard when proposed rules, regulations, and statutes pose substantiated threats to the environment and sensitive ecosystems that many commentors here wish to protect and enjoy.

What many people do not understand is that drones provide great value, both personally, and to society as a whole. Drones are used by photographers and videographers to capture, among other

things, exquisite landscapes. Drones help people tell stories. Drones are also used to collect data and remediate climate change. In fact, unlike traditional data collection efforts that utilize crewed aircraft (airplanes/helicopters), a large majority of drones are powered by electric batteries, which, in turn, means drones have less of an environmental footprint than traditional aircraft. Drones have, and will continue to, reduce society's carbon footprint. According to a study conducted by the Virginia Tech Office of Economic Development, drone delivery in a single metropolitan area could lessen the miles per year in road use by 249 million miles; the equivalent of planting 46,000 acres per year of new forest and reducing carbon emissions by up to 113,900 tons per year. (Virginia Tech Office of Economic Development "Measuring the Effects of Drone Delivery in the United States" p. vi (September 2020)). While folks will likely not be receiving their Amazon packages via drone at state parks across the U.S., this study goes to show that drones will continue to help address, analyze, and remediate the very thing people seem most concerned about with this rule—protecting the environment, its species, and the enjoyment thereof.

In closing, I'd like to thank you for giving the public an opportunity to comment on this proposed rule. To reiterate, this rule, if passed, will set a standard for other state parks to follow. Please consider this as you move forward with your decision. Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

James DiEdwardo

jim@flashpowered.com

Public comment:

Thank you so much for supporting the drone hobby! I fly with my son and we have had many wonderful father-son days enjoying this exciting and wholesome hobby. We are grateful for the freedom to visit our incredible state parks and fly responsibly and respectfully of others. We fully support the new rule that allows us to do so - with the exception of specific areas that the park has deemed off-limits.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesWednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Shannon McMurchy semcmurchy@gmail.com

Public comment:

Absolutely NOT!!!! Drones are obnoxious, intrusive, and will most certainly upset the birds of Smith Roxk including nesting bald eagles. Just say NO to drones in all parks and public spaces. PLEASE.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Kenneth Martin

KMartin20@Indy.rr.com

Public comment:

I do not live in Oregon, but I want to thank those of you who do for your far-sighted proposal. I am 78 years old and have been involved in flying model aircraft since I was 10 years old. I am also a private pilot. I have flown drones for almost eight years and found them a safe and satisfying hobby. I have created a You Tube channel so that I can share the video created from the unique perspective offered by these models. I've also been involved with one of the only 4H clubs offering "hands-on" flying experience to kids from the 4th thru 12th grades. Drone technology is the future and introducing this tech to our youth is a necessity for the continued leadership of our country. Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Whidden

tanber2004@gmail.com

Public comment:

I support the safe operation of drones as recreation in state parks, when done in compliance with FAA rules and community-based organization safety programming (eg. The Academy of Model Aeronautics), unless a review identifies a concrete reason for takeoff and landing to be prohibited in a particular area or at particular times. However, unsafe or discourteous activities, whether drones or any other form a recreation, should of course be forbidden.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Brandon Mcdermott

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

tukmcdermott66@gmail.com

Public comment:

In my time flying drones I've never came across any one who isn't being crazy careful while taking off in places like this. I've never seen them not let people know what's going when interested or even asking if its OK in certain situations. Ive never once personally taken off even if i thought for a second i was going to bother or harm wildlife and im sure many can agree with me on that. Any person who is flying drones in the capacity needed to actually take off in these places with the conditions they hold definitely knows how to fly and isn't gonna put anyone or anything in danger. Most people who would be a danger in these situations already crashed the toy drone they got for Christmas and gave up. Flying can be fairly difficult and to have the knowledge to fly in these places would almost never be done by someone inexperienced in the first place. But to ban from these areas doesn't make sense. We won't have these areas or images forever why not take as many pictures as possible and stop bothering people who have a super fun hobby.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Shawn Schneider shawn@schneiderville.com

Public comment:

I think having locations that have big open spaces is a great way to help encourage responsible drone use and practice.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Leah Lyon

leahlyon10@gmail.com

Public comment:

I do not support the free use of the public to fly drones, model airplanes, or other flying objects in public park spaces. The public who desires to do this past time should acquire a private location with a set amount of space between the air field and residential homes. It's extremely disruptive to the daily lives of a residential community, to have that sort of noise pollution in their backyard.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Solomon Singer

singers@lanecc.edu

Public comment:

I am the Program Director for the Aviation Unmanned Aircraft Program (drone program) at Lane Community College in Eugene. I fully support increasing the land available to drone operators, and promoting state parks in Oregon to support drone operations. Drones are used for a variety of valuable services, including invasive weed distribution mapping, search and rescue, aerial photography, videography, and enjoyment. Since drones are such a large part of the industry and community, it would be wise to clarify fly and no fly zones for this common type of "flying camera" system. Many people like to fly for fun, and do so in a safe and responsible manner with registered drones and licensed pilots. Oregon State Parks are known for their beauty, ease of access, and welcoming atmosphere, and I highly recommend the welcoming attitude be extended to our unmanned aircraft operators as well. Lives have been saved and beautiful photos have been taken with drones. We all benefit from them, and State Parks are wonderful places to enjoy from on the ground and in the air. Thank you!



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Todd Mcmeen fixed20@hotmail.com

Public comment:

Please no recreational drone use in our state parks. Emergency use would be fine but anything else should have a permit and posted notice when in use , so that we have the option not to be distributed in nature



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Gordon Yutzy

gyutzy@bendcable.com

Public comment:

The proposed rule changes to 736-010-0015, 736-010-00400, and 736-010-0030 are a good compromise for drone enthusiasts and anti-drone persons. Current rules in parks and on the ocean shore stipulate that a person may not engage in public nuisance or hazardous behavior. The proposed rules wisely add harassment, disturbance, pursuit, or injuring wildlife to the list of prohibited activities.

I am licensed to fly unmanned aircraft systems under Part 107 of the FAA rules. The FAA rules also prohibit harassment of wildlife and people. Safety is the first thought of a licensed drone pilot. We are required to keep the aircraft within visual line of sight and to not fly over people. I have found that when I am flying in a safe intentional manner, people approach me out of curiosity; not to stop me from flying in a park.

I recommend the proposed rule changes be made permanent. This will allow drone enthusiasts guidance on where they can fly and rules for safe enjoyment of drone flights.

Respectfully, Gordon Yutzy



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

cj stuart

ms b have n@yahoo.com

Public comment:

I hate drones and they should not be allowed in state parks unless used by biologists/scientists for specific reasons. They are unsightly and noisy nuisance and if I am at the coast or in a state park I am there to get away from the city and technological gadgetry.

I in no way want to be bothered by the sight or sound of a drone ever but I understand that they may be helpful to study certain aspects of the environment by trained personnel.

I know I am not the only one who feels this way and just heard about this on OPB this morning. Time is running out for public comment and I am sure there are many people who have no idea that this is even happening and would love to comment on how much they hate drones.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Tom Olbrich tolbrich@gmail.com

Public comment:

I am a life long Oregon resident - 64 years now - and I am quite concerned drone will be allowed in our parks. I will not visit any park that allows drones to take off or land in any way. Please limit drones in parks in any way possible. Thank you for your process and for allowing public comment to have an impact on the decision.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Ervin Siverson

ervnancy@msn.com

Public comment:

Hello:

Our places of solitude are quickly disappearing due to our increase in population. And our state parks and coastal areas are treasures where one can find solitude and relaxation. And recent articles in the Oregonian show that our Oregon state parks and coastal areas are as popular as ever.

Drones are noisy, intrusive, an invasion of privacy and are truly unnecessary for any reason in our state parks and coastal areas. They disturb wildlife and the humans trying to relax and observe said wildlife. And to allow them in any fashion would require further enforcement by park officials whose resources are already stretched thin. Ban them completely unless needed by an emergency or by a special permit, such as for research.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Isaac Taylor

taylortisaac@gmail.com

Public comment:

Recreational flyer should be able to take off and land in these areas if they have taken the TRUST exam. They could be required to provide their TRUST certificate/number to rangers/law enforcement.

Part 107 pilots could provide that info.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Parker

m.parkerap@gmail.com

Public comment:

Drone enthusiasts pay taxes and fund the maintenance and development of these parks and should be allowed to use them. Specific dates or times that these flights would be allowed would be a great way to share the park with the public and notify them that drones will be present at these times.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

David Duncan

davidduncan4715@comcast.net

Public comment:

I am adamantly opposed to allowing any use of recreational drones in state parks. The National Park Service prohibits drones in national parks and Oregon's proud park system should adopt this policy as well.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Bob Kopprasch

Public comment:

To OPRD:

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

drbobk@gmail.com

Thank you for the opportunity to comment on the proposed rules for drones in Oregon State Parks. I appreciate that you are considering the views of many individuals as you proceed.

I hope that you write the rules to prohibit drones only in those places that you specify, both by geographical description and perhaps by context (no closer than 100 feet to nesting birds...). This will accomplish your goal and yet hopefully leave the vast majority of the acreage available to responsible drone pilots who want to film the beauty of the parks. I am afraid that if you specify only those areas where takeoffs and landings CAN occur, this would unnecessarily broadly limit the ability of responsible drone pilots to film wilderness areas.

We all know there are jerks who own drones, just like there are jerks who own cars and jerks who own motorcycles, etc., but rule making shouldn't unfairly limit the law (and rule) abiding citizens for fear of what the jerks might do. It is likely that they will be ignorant of the rules or flaunt them if not, and they should be dealt with severely if that's the case. As a Part 107 Remote Pilot, I (and others like me) follow all FAA regs and would not present a nuisance to other individuals or wildlife. I know that some people have a knee-jerk aversion to drones, and maybe they have been affected by a jerk with a drone, but many just THINK they don't like drones. In my community, I've filmed and photographed many events and people eagerly await the video afterwards. One even got an insurance payout after the insurance company viewed my video of a flood we had.

Drones can capture the beauty of an area, and make it accessible to those who can't reach the area, whether due to accessibility, time commitments, distance, etc. It would be a shame to limit flight takeoffs and landings to a few spots rather than prohibiting takeoffs and landings in the appropriate spots. I fear that if the rule specifies only allowable areas, those in charge will find a few unobjectionable spots and then say "OK, that's plenty." and never return to open it up further.

I see that many of the negative comments here follow a script. Part of that script I agree with - let science (not gut) be the deciding factor. Both pro and con should agree to that.

Finally, I don't want to unnecessarily add length to this to make the points that others have made. However, I'd like to call your attention to the submission from James Krier (of Portland), who made sensible arguments and supported them with data and references. Please read my comment here

as if it had included everything he said (so well).

Thanks again for reading.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Public comment:

Drones should not be allowed in state parks as they ruin the solitude and beauty of the experience in the same way that smokers ruin other people's enjoyment of eating in a fine restaurant. Smokers are free to smoke in their own homes, and drone operators should be flying only in designated, private airspace. Please prohibit drone flying in all state parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael K

michaelkko36@gmail.com

Public comment:

Although I am only a novice drone enthusiast, I love seeing the wonderful footage of the beautiful Oregon scenery. I think our nature needs to be captured one before it is too late and drones are the best way to collect the beauty and share with the world.

Also, drones can be a useful tool for surveying and searching!!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Dan Kelly

dkellyoregon@gmail.com

Public comment:

Drones are here to stay. They are a great hobby, it would be helpful if the state endorsed them instead of trying to ban them. Designated take of and landing zone would definitely help.



Oregon Parks and Recreation Department

Proposed rule change:

Wednesday, April 6, 2022

Date comment received:

Take-off and landing of drones

Commenter name (if provided):

Commenter email (if provided):

Pat Langdon

langdonpm@hotmail.com

Public comment:

Don't allow drones in Oregon State Parks - Please!! Take off, landing, or air space.

Drones are a source of noise pollution and invade the personal space of others with use of their onboard cameras and simply their proximity. Oregon State Parks are for everyone to enjoy; their natural beauty and peace should not be compromised by the harmful impacts of drones for the enjoyment of the very few.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Public comment:

Please do not allow drone use on the beaches. Visitors tend to congregate around the entrance points and do not travel far up or down the beach. In the summer it is difficult to exit the beach without being hit with a kite or navigating between groups. Please don't add drone operators to the mix. I beach walk several miles, several times per week and do not wish to hear the drone whine, nor want one hovering over my head while walking. There may be places where pedestrians are not an issue and they could fly their drones out over the ocean without violating the privacy of others.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Taylor

mstaylor77@hotmail.com

Public comment:

What right do people have to not be filmed by the people operating the drone?

How is the policy going to be inforced and by who? There is already people letting their dogs run lose and there is a dog on leach rule.

Who do we contact to report violation? You can never find a number to report violation on your website or park entrance. We have look countless time for a park ranger number to report issues. Most of the issues are outside the normal working hours.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Fenske

mfenske99@yahoo.com

Public comment:

As a drone hobbyist and photographer I'd love some clarification on where and how I can use my drone legally here in Oregon. I've been very hesitant to use it in state spaces and would appreciate a broadening of where they can be used (even if that's subject to fees or licenses). Oregon is such a beautiful place to live and I'd love to show it off!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Yvonne Cass

yvonne ca@hotmail.com

Public comment:

I am new to drones. I am not new to Oregon however. I am a disable, retired vet and love to travel when I can. Sometimes, my mobility is somewhat limited. Part of learning to fly is 1-to get me out in nature to help with my PTSD and 2-to explore this beautiful state. I am respectful and try to follow the rules. Please continue to allow people such as myself to continue flying. I am respectful to wildlife and humans alike when flying. Thanks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Manon Veilleux

knobler50@gmail.com

Public comment:

Thank you for this opportunity! I am an Audubon volunteer and am extremely concerned about drone activity impacting wildlife. I am requesting that all state parks and beaches be closed to drone take-off and landings except where they can be safely allowed. I think state parks should determine where to allow drones based on the best available science about human and wildlife impact and that state parks should create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts. While designated areas are being determined, status quo drone use could continue (i.e. this would not ban all drone use at any time during the process). State parks should include a final map(s) of designated drone take-off and landing locations on their website, and in areas that are approved for drone use, include in the rules:

-No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting

- locations or from seal haul out and pupping areas.

 Drope take off and landings should be discontinued if repeated wildlife disturbance events occur.
- -Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.
- -All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time.
- -State parks should include strong enforcement mechanisms in final rules

Thank you for considering these concerns.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Kent Iler kent@iler.com

Public comment:

This is well written. It is allowing drones where safe, and only forbidding them where it would cause conflict with people or wildlife. I travel around the world with my drone to capture the wonder and beauty of nature, and I want to make sure that I can do the same when visiting Oregon!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Nicholas Lawson

nicholaslaw040@gmail.com

Public comment:

I have flown drones for about 6 years now. I am responsible with my flying. I don't fly around people or bother wild life. I would love to be able to fly in the state parks as long as I wasn't disturbing others.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Hazel Schlesinger

riverhaze@gmail.com

Public comment:

I believe Oregon should have the same rules in our State Parks that our National State Parks have...NO DRONES allowed! The obvious reason is disturbance to wildlife, birds and nesting and public enjoyment without an intrusive drone . Please do not allow drones in Oregon Public parks and especially State Parks!

Why should anyone flying a drone out weigh the right of the public to have peaceful and solitude experiences in a state park?



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Mark Goldsworthy boxmg@aol.com

Public comment:

Drones are annoying and disruptive anytime they fly in the wild. They don't belong in any state park or wildlife area. I don't think anybody goes to the coast or anywhere for a walk in the woods hoping to see a drone.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jamie Goodwick

Jamie@PORTLANDRONE.com

Public comment:

Firstly, thank you for the diligent effort to establish rules and boundaries for flying UAV in Oregon State Parks. For several years, we've been approached with many questions regarding where to fly - specifically to State Parks and have had a hard time giving guidance without established guidelines to recreational and commercial drone pilots.

Additionally, many of our clients look for guidance on how to obtain drone footage from Oregon State Parks, so these guidelines will give them - and us - better understanding on how to obtain such footage.

We're so blessed to live in such a beautiful state - and it is meant to be explored - on the ground and in the air.

It's entirely reasonable that Oregon State Parks should be in charge of establishing areas within specific parks that may endanger Wildlife or make cause harm to others - and therefore limit drone operations.

Opposing comments argue drones should be banned or limited. Prohibition in general is not the answer - because it will not stop incompetent drone operators from flying in State Parks, so thank you again for not taking that route. Severely limiting the areas where folks can take off is also not the answer - and may even cause more danger as operators may recklessly try to fly to areas that are further away than if they could launch from anywhere.

Opposing comments argue drone pilots are incompetent. I believe most drone operators are indeed competent, and are always looking for a responsibly way to fly. If guidelines are not established, that's where rouge drone piloting will occur.

Opposing comments argue drones are loud. Drones are getting smaller and more quiet. Hopes are moving forward drones will not be such a nuisance to general public.

In short, Oregon is meant to be explored - reasonably and responsibly - and drones are a stunning way to do so. I offer my services to help in anyway bridge the gap between Parks, Drones, and General Public.

Jamie Goodwick @ PORTLANDRONE



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Aaron Lambert

alambert@generalpacific.com

Public comment:

I am in support of this and how the proposed rules allow drone use where safe, and will forbid drones where they shouldn't be. Drones are a great tool!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

David K

Public comment:

I camped at Nehalem Bay State Park over the July 4 Holiday in 2020 and 2021. The July 4 Holiday at an Oregon State Park is already very busy. During both visits several times on multiple days, I heard, observed and monitored aerial drones above the campground and beach. Late afternoon, evening and after dark were the busiest times. The sudden movements, incessant buzzing and flashing lights were quite disruptive. I watched drones go everywhere including above campsites, showers, restrooms, around the aircraft landing strip and directly above posted sensitive habitat areas. I kept wondering, exactly who was watching who? I spent much of that piercingly creepy flyover time under cover and inside facilities. It certainly was not the way I intended to spend my limited time in Oregon's nature. It was just too creepy and suspicious for my taste. Listening to a drone's buzz late in the evening while trying to sleep almost sent me packing. It was a horrible experience.

I am in favor of significant restrictions, rules and limitations for aerial drones. I believe they're like ATV's. Which are only allowed in certain areas and under certain conditions. A permit sticker is also required for ATV's.

I believe a permit sticker should be required for Remote Operated Aircraft as well. Matching stickers should be placed on the vehicle and the controlling transceiver. Permit stickers will help OPRD monitor and understand the scope of drone use. Simply tracking the number of active permit stickers regionally could provide OPRD valuable information about drone impact and potential next steps.

In addition to permits, and like ATV's, identifying specific locations, seasons and times that drone use is allowed would be a good starting point.

I'm fervently in favor of a blanket prohibition on drones in and above Oregon State Parks, except where and when specifically allowed.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Linda Fields

linda.lindafields@gmail.com

Public comment:

Thank you for the opportunity to communicate on this issue. I appreciate your efforts in trying to balance the desires of those who find recreation in operating drones and those of us who find pleasure in locations where the sounds and sights of nature enrich our lives. Many, maybe most, of us cannot afford to possess drones for recreational use but many Oregonian are able to appreciate the quiet areas of Oregon's public lands.

Of utmost concern for those of us who enjoy observing and studying the natural world is the need to protect wildlife from disruptive sound pollution such as that created by drone use. I urge OPRD to proceed cautiously and consider the following:

- Prohibit drone take-off and landings except in locations where it is deemed less likely to disrupt Oregonians using natural areas for quieter recreational pursuits and in locations which could be harmful to vulnerable wildlife
- Determine where to allow drones based on the best available science
- Discontinue drone use where repeated wildlife disturbance events occur in the same location.
- include strong enforcement mechanisms in final rules

Thank you, Linda Fields Portland OR 978203



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Karen/Tom Kwiecien/Roick

Public comment:

Hi there.

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

terkbk@comcast.net

We are frequent visitors of Oregon State Parks. When we visit a Oregon State Park, we are looking for an unique experience to connect with nature. We seek tranquillity and serenity while seeking the many wonders of Oregon's flora and fauna in all their glorious and varied habitats. Drones do not enter in this equation. They are a part of the mechanized world and do not belong at Oregon State Parks. When we have encountered drones in the outdoors, they are distracting and disruptive. They can change the mood and experience within seconds. We would strongly recommend preventing drones in Oregon State Parks or heavily limit their presence in very specific areas where there are already a great deal of people and cars.

We appreciate the opportunity to voice our opinion. Thank you, Karen Kwiecien and Tom Roick



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Byron Will

byronjwill@gmail.com

Public comment:

Drones should not be allowed to fly in our lovely and peaceful state parks.

They destroy the peace and serenity we desperately need in these troubled times. Our beautiful public parks are being utilized more than ever as places of rest and relaxation. We don't need our privacy compromised by these devices with video cameras. They are banned in Portland and other cities for this and many other reasons.

They disrupt wildlife and there is no one to oversee their use in our parks. Park staff is already stretched. I spend a lot of time in our parks, and have witnessed abusive drone behavior that is a growing and troubling concern.

Drones should not be allowed to fly in our lovely and peaceful state parks.

Sincerely, Byron Will



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

S Kwan

Public comment:

To Whom It May Concern,

Having grown up here in the Pacific Northwest, the love of nature was instilled in me from a young age. I have learned to appreciate our outdoor spaces and know how important it is that we protect this unique and precious resource.

I have reviewed the comments submitted and noted the numerous letters from residents, birders, conservationists, and other stakeholders citing evidence of the destructiveness of drones upon wildlife and their habitats, plus the negative impact to the people trying to enjoy the natural beauty that is around them.

While letters from a lot of drone operators only calls for their "right" to enjoy the outdoor spaces in their own way and should be "free" to fly drones. Yet they fail to acknowledge other people's "right" to quiet enjoyment of this shared public space. The general impression I gathered from drone operators is that their stance is purely in their own best interest and simply ignore the articles and statistics that highlight the negative impact drones have.

Drone operators state that there is already guidance and regulation for their use, but with drones so widely available, how many of them actually are licensed to fly? Who out there are enforcing the regulations?

From a practical standpoint, wouldn't enforcement of regulations actually be realistic if there is a ban on drones UNLESS it's in a designated area?

At the very, very least, drones should be banned during nesting season to ensure the birds are not disturbed during such a vulnerable time.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jeremy Reeves

jman551@gmail.com

Public comment:

As written, this rule appears to compromise and provide opportunities for sUAS pilots to fly within their legally allowed Federal airspace but protect wildlife and people where appropriate.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Wednesday, April 6, 2022

Date comment received:

Commenter name (if provided):

Commenter email (if provided):

Guy Wettstein

guywettstein@gmail.com

Public comment:

I believe climbers, hikers and wildlife should be able to enjoy natural areas without the intrusion, disruption and potentially dangerous presence of drones. I don't like to put judgements or limits on other peoples' hobbies and I realize that aerial drone photography has value. However, as a climber, having amateur drone pilots buzzing around areas like Smith Rock is unnerving, not to mention that there are birds nesting there throughout the year. I just don't see why we need to allow drones outside of a very rare permit for qualified pilots. Keep these areas as quiet and peaceful as possible, please. We have enough technology everywhere else.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Peter Peter

lindaypeter@gmail.com

Public comment:

BANN DRONES IN STATE PARKS

Drones are banned for good reason in Federal Parks.

Drones are invasive, disturbe users and a hazard. I was forced to leave an area beacuse of thoughtless drones users - at Champoeg and Cape Lookout. Once the drones flew up and down the beach and drove off two bald ealges. They were also in the campground making low passes and lots of noise. At Champoeg a drone operater took over the dog area forcing users to leave.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Dawn Harris dawn harris@fws.gov

Public comment:

Thank you for the opportunity to submit comments on rules surrounding the take-off and landing of UAS/drones in Oregon's parks and beaches. Attached are official comments from the U.S. Fish and Wildlife Service's Oregon Coast National Wildlife Refuge Complex.

Dawn Harris

Visitor Services Manager U.S. Fish and Wildlife Service Oregon Coast National Wildlife Refuge Complex Newport OR



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Oregon Coast National Wildlife Refuge Complex Willapa National Wildlife Refuge Complex



April 5, 2022

Oregon Parks and Recreation Department c/o Katie Gauthier, Legislative Coordinator 725 Summer St NE, Suite C Salem, OR 97301

RE: Comments on the creation of rules surrounding take-off and landing of Unmanned Aircraft Systems within a state park and along the ocean shore

Ms. Gauthier,

The U.S. Fish and Wildlife Service's (FWS) Oregon Coast National Wildlife Refuge Complex (Refuge) hereby submits these comments and recommendations regarding Oregon Parks and Recreation Department's (OPRD) proposed changes to Oregon's Administrative Rules surrounding the take-off and landing of Unmanned Aircraft Systems (hereafter referred to as drones) within state parks and along the ocean shore. The FWS appreciates the opportunity to offer recommendations that will serve to help prevent disturbance to wildlife by drones. We further applaud OPRD's efforts to both make rules and develop policy surrounding drone use and to provide the clarity needed by commercial and recreational drone pilots and hobbyists on where drone take-off and landing is allowed or prohibited within a state park and along the ocean shore.

Along Oregon's coastline the Refuge manages six national wildlife refuges that provide habitat for a host of coastal, marine, and estuarine wildlife including seabirds, shorebirds, marine mammals, anadromous fish, migratory songbirds, waterfowl, and more. Oregon Islands National Wildlife Refuge is one of these six refuges. It spans 320 miles of the coastline, includes 1,853 rocks, islands and seastacks and provides nesting habitat for 1.3 million seabirds. Species using the refuge include shorebirds such as black oystercatcher and western snowy plover, seabirds such as tufted puffin, common murre, and pigeon guillemot; and nine additional seabird species along with tens of thousands of marine mammals. The islands are critical for nesting seabirds and shorebirds, but they also make for scenic drone videos.

Marine and coastal wildlife should be free from harassment by visitors, especially on public lands conserved as habitat for breeding and nesting. Nesting birds can perceive a drone flying over them as an aerial predator that poses a fatal threat to their eggs or chicks. This exact scenario has become increasingly common along the rocky shore in Oregon¹. For several years, refuge staff, volunteers, and citizen scientists working with Portland Audubon have documented disturbances of shorebirds and seabirds by drones in multiple locations along the

Oregon coast. In response to drone activity, birds may leave their nests to avoid attack by what they think is a bird of prey. As a result, unattended eggs and chicks are left vulnerable and exposed to real predators like gulls, crows, and vultures. These disturbances have consequences, especially for bird species of conservation concern², including the tufted puffin and black oystercatcher³. In neighboring California on a critical nesting island within the Bolsa Chica Ecological Reserve thousands of elegant terns abandoned every single nest⁴ totaling a loss of 1,500 to 2000 eggs after a drone crashed on the reserve grounds on May 13, 2021. Undisturbed loafing, haul out, and foraging habitat is also a critical need for shorebirds, seabirds, and pinnipeds. Even outside of the nesting season, roosting sites of some seabirds can be impacted by high levels of human disturbance and recommendations are to close these areas to mitigate these impacts⁵.

Drone use has increased throughout the United States. Within Oregon, both federal and state agencies have fielded questions about and addressed conflicts among recreational user groups and drone hobbyists. Drones are frequently operated over public lands that are under the jurisdiction of state or federal land management agencies. Because the airspace above these lands is regulated by the Federal Aviation Administration visitors are often confused as to which agency can restrict this activity or address conflicts between user groups. Despite not being able to control the air space, agencies do have some control over drone operation; they can control where a drone can take-off and land and thus help mitigate disturbance to marine wildlife.

To reduce harassment and disturbance of wildlife and to ensure visitors have an enjoyable, safe experience void of interruption by drones, FWS developed and adopted federal regulations (50 C.F.R. § 27.34) surrounding aircraft, including drones, on lands owned and managed under the National Wildlife Refuge System.

50 C.F.R. § 27.34 The unauthorized operation of aircraft, including sail planes, and hang gliders, at altitudes resulting in harassment of wildlife, or the unauthorized landing or take-off on a national wildlife refuge, except in an emergency, is prohibited. National wildlife refuge boundaries are designated on up-date FAA aeronautical charts.

Further, the 1,853 rocks, islands, and sea stacks that are protected as part of Oregon Islands National Wildlife Refuge are also congressionally designated wilderness. Drones are prohibited from launching, landing, or being controlled from within federally designated wilderness areas. The Wilderness Act of 1964 set aside large tracts of public land as federally protected wilderness areas. Wilderness areas represent relatively pristine wild lands and waters that have received extra protections, so that they remain undisturbed by human activity. The operation of drones near or above Wilderness Areas impacts the untrammeled character of the wilderness by creating noise pollution.

Nesting seabirds and marine mammals are protected wherever they occur by several federal laws and regulations including the Migratory Bird Treaty Act of 1918, as amended (16 USC 703-712) and the Marine Mammal Protection Act (MMPA) of 1972. However, these laws are difficult to enforce, and often require enforcement officers to be present during the incident to document the source of the disturbance and responsible party. Further, these laws do not

and cannot regulate the take-off and landing of drones, but rather regulate the impacts of disturbance of wildlife by people. Because an operator and their drone can be separated by a substantial distance, the responsible party can be difficult to locate which would allow us to contact and educate them about wildlife disturbance they might be causing. As policy is developed, FWS requests OPRD allow for changes to areas designated for take-off and landing by drones if it is determined that repeated disturbance events are negatively impacting nesting seabirds or marine mammals.

Specific recommendations are as follows:

- 1. Change the rule to prohibit the take-off and landing of drones on state park lands *except* where the activity can be safely permitted without impacts to wildlife or other user groups. This change in the rule language would provide consistency with existing non-traditional uses on state lands (ie. hunting, metal detecting, fishing, trapping) as well as consistency with the FWS process for recreational uses. By clearly defining allowable areas for drone use, the regulations are easier to understand and drone operators can be directed to specific locations where participation in this activity will not cause negative or unintended impacts.
- 2. Permanently prohibit the take-off and landing of drones on Oregon's beaches, rocky shores or within parks that are adjacent to significant nesting colonies and haul out sites to protect migratory seabirds and marine mammals. In collaboration with FWS and ODFW, develop a map that delineates sensitive nesting and haulout areas along the coast and in state parks where take-off and landing of drones is prohibited to protect wildlife and shows areas where take-off and landing is allowed. If a permanent closure near colonies is not an option, FWS would support a seasonal prohibition. If the decision by OPRD is a seasonal prohibition, the closure would ideally coincide with the seabird nesting season, the marine mammal pupping season and the Western Snowy Plover nesting season which is from March 15 September 15.
- 3. Increase collaboration between Refuge Law Enforcement, Oregon State Police, and OPRD beach rangers to address disturbance and harassment of marine wildlife by drones during events when visitation on the coast is at its peak. These include but are not limited to extreme low tides; holiday weekends including Memorial Day, Spring Break, Independence Day, and Labor Day; and special events like Sandcastle Day or Dory Days.
- 4. Improve signage and consistent messaging in areas where drones are prohibited from taking off and landing through a joint task force/agreement between FWS and OPRD and other wildlife resource agencies. This task force would make decisions on design, location, and procurement of informational and regulatory signage. Some of the messaging should include etiquette guidelines such as immediately halting any drone flights that disturb wildlife, including returning a drone to its launch site and abandoning additional flights in this area.
- 5. Work with Travel Oregon and the Oregon Coast Visitors Association to push strategic messages about drone etiquette prior to Memorial Day, Spring Break, lowest tides of the summer, Independence Day, and other high visitation events. These are times when marine

wildlife abundance on beaches and islands is peaking and it coincides with the times of highest public visitation.

In closing, we agree with OPRD that a rule should be made regarding the take-off and landing of drones to better protect wildlife, the privacy and safety of visitors, and to reduce user conflicts. Existing laws are inadequate. Having clear, concise, and similar language and policy protecting wildlife from drone harassment should be a common goal for our agencies. We look forward to working with you and request be included in technical committee discussions to develop criteria and maps that establish drone take-off and landing areas on the coast.

Sincerely,

Kelly Moroney Project Leader Oregon Coast National Wildlife Refuge Complex

¹ Drone Use Putting Pressure on Nesting Seabirds on Oregon Coast. 2021. https://medium.com/usfwspacificnw/drone-use-putting-pressure-on-nesting-seabirds-on-oregon-coast-b77241ca73ec. Accessed April 2022.

² U.S. Fish and Wildlife Service. 2021. Birds of Conservation Concern 2021. United States Department of the Interior, U.S. Fish and Wildlife Service, Migratory Birds, Falls Church, Virginia. https://legacy-assets.eenews.net/open_files/assets/2021/06/15/document_gw_02.pdf

³ Oregon Conservation Strategy. 2016. Oregon Department of Fish and Wildlife, Salem, Oregon.

⁴ Thousands of eggs abandoned after a drone scares off nesting birds. 2021. https://www.washingtonpost.com/science/2021/06/07/drone-crash-abandoned-eggs/. Accessed April 2022.

⁵ The hidden cost of disturbance: Eurasian Oystercatchers (Haematopus ostralegus) avoid a disturbed roost site during the tourist season. van der Kolk, H.J., Ens, B.J., Oosterbeek, K., Jongejans, E., & Van de Pol, M. 2021 Ibis. doi: 10.1111/ibi.13035



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jared Rose

jaredrose@live.com

Public comment:

The take-off, landing and flying of drones by the general public should be prohibited in all state parks. While there are always exceptions to the rule and there should be in this case, the baseline should be a complete prohibition of drones with the exception of specific scientific or commercial needs that the state or partner agencies determine. John Q Public with his Instagram and YouTube should never be allowed to fly one in a state park.

Not only are they a nuisance to every other park user not flying a drone, they are a potential danger to the general public and a proven danger to wildlife. There is no need to have them in our state parks and I urge you to rethink the proposed position and return our incredible state parks to the natural state or peace, tranquility and animal habitat that they belong. That is why I spend dozens of weekends a year in our state parks, not to hear the incessant buzzing of drones chasing off animals.

Thank you! Jared



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Shauna Vincent

pixiekiddle@yahoo.com

Public comment:

Drone take-off and landing should be restricted in state parks. The parks are a place for animals to thrive in habitat free from harrassment as much as possible. The parks are where people go for desperately needed peace in nature. Anxiety and depression are epidemic and people benefit from having a place to disconnect from technology, privacy invasion, and the buzz of machines. Please restrict drones from state parks.

Thank you,

Shauna Vincent



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jon Penhallurick

jon@jonboyproductions.com

Public comment:

I am not comfortable making regulations, then drawing up maps with bounties and clear representation of what you are really talking about.

One comment about selecting hot spots for "abuse" by drones, but not a blanket rule for all locations. I am in favor of the beaches being open. Of course in ultra crowed areas, it makes sense to have some areas to stay away from. I fly at the ocean many times. Other than the Bi-planes and the Coast guard helicopters that fly below 400 feet I've not seen a issue. RZR's run the dunes, and people complain about it. Look at the revenue generated for the coastal cities. Is a drone going to harm the area? The bird areas are clearly marked with yellow tape and people respect that. A blanket for the whole area is just not right.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Steve Pearson

steve.m.pearson@gmail.com

Public comment:

Drones are a loud, invasion of privacy. Drones can also be dangerous to bystanders. Why not just have everybody vising a park bring a yard blower too.

Ban launching and landing outright!



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Defne Cakin

Public comment:

No drones

Date comment received:

Wednesday, April 6, 2022

Commenter email (if provided):

defcakin@yahoo.com



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Arjen Hoekstra arjenstefanie@yahoo.com

Public comment:

Please limit the use of drones as much as possible. It is invasive technology and does not go along with a peaceful nature experience at all.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Barry Eichinger

beichinger12@gmail.com

Public comment:

I listened to a discussion on OPB this AM, I find it absurd that State Park authorities feel that they can only regulate what happens on the ground in state parks and not the air space above. Why not at least thrree hundred feet above ground as well for instance.

Drone use unless by commercial operators with specific permitted purpose can be generally assumed to be a use for invasion of privacy either with wild birds or urban neighbors.

No drones should be allowed in state parks or any public parks because there is an assumption of respectful privacy for all users. you can't play loud music, quiet times are imposed, one can't go into another campsite uninvited, or film people surreptitiously.

I don't think that drone operators can be assumed that they will be respectful of the privacy of other park users.

It should be assumed that all park users expect and be respectful of the privacy of all users



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Patrick McKay

patrick@fairusetube.org

Public comment:

I am a long-time drone enthusiast and former attorney from Highlands Ranch, Colorado. Though I am not an Oregon resident, I have traveled to Oregon in the past on vacation and hope to go there again sometime soon. If I do, I would absolutely want to be able to fly my drone over scenic areas in Oregon State Parks and along the seashore.

I have been flying drones and RC aircraft as a hobby for 10 years. I enjoy flying a variety of both fixed-wing RC airplanes and quadcopter drones, flown using first-person-view (FPV) video piloting systems. It is a thrilling activity that gives me the ability to experience virtual flight as if I was a bird while staying on the ground. It also allows me to take spectacular aerial photographs and videos that would not be possible with a manned aircraft, which I like to use to make scenic music videos that I post on YouTube.

As a former attorney, I have always closely followed the legal atmosphere surrounding the hobbies I participate in. During the time I have been involved in RC flying, I have seen what was formerly considered a harmless hobby become increasingly vilified in the eyes of both the general public and government officials. RC flying has increasingly become subject to a dizzying array of restrictions and regulations from every level of American government.

The actual operation and flight of unmanned aircraft is now subject to strict regulation by the Federal Aviation Administration (FAA), while it has become fashionable among many public land managers ranging from the National Park Service to municipal parks departments to ban drones from being flown in parks with no real justification. As a result, drone enthusiasts like myself have been left with an ever shrinking number of legal places to fly. Drones are now subject to such a confusing patchwork quilt of Federal, state, and local government regulation that one practically has to be an attorney to understand where and how they can legally fly a simple RC plane or consumer quadcopter drone.

I fully support OPRD's proposed drone regulations and believe they are quite reasonable. Rather than imposing a blanket ban on drones as knee-jerk reaction to a widely misunderstood and falsely maligned technology, OPRD has written a rational, well-thought-out policy that gives Oregon State Parks the flexibility to prohibit drones where they are truly inappropriate while still allowing them everywhere else by default. This policy conforms to the basic American principle of law that a given type of conduct is allowed by default unless expressly prohibited by law.

Because drones are primarily used for photography, drones have significant First Amendment implications. A federal court recently struck down a Texas state law because its provisions singling out drone photography for special restrictions were an unconstitutional content based speech restriction under the First Amendment. See NPPA v. McCraw,

https://nppa.org/sites/default/files/NPPA%20vs%20McCraw.pdf?

fbclid=lwAR2C5XrqhQMWllDEMl_gDGoFNtqx3u0zMoiqMf-30f1wE0d85lcNfG2YjOk. Therefore any governmental entity must be careful to ensure that any restrictions it imposes on drone flying are narrowly tailored to meet a specific government interest unrelated to the content of drone imagery, and it must not unduly discriminate against drone photography vs. other forms of photography.

By and large, drone flying is a harmless activity that is entirely appropriate in most areas of public lands. While some public lands users may find drones annoying due to their noise, the reality is that most drones are hardly audible once they are a few hundred feet away. While it may be appropriate to ban them in locations where large numbers of people congregate such as campgrounds and crowded viewpoints, in the vast majority of locations within Oregon State Parks a drone can be flown without disturbing anyone. Drones also have minimal effects on wildlife as long as they are not flown very close to animals.

The proposed OPRD rules appear reasonably tailored to address both of these issues while still allowing drone flyers the greatest possible freedom to fly in areas where that activity is appropriate. The rules designate sensitive wildlife areas as prohibition zones and prohibit operators from using drones to harass wildlife. The proposed rules also give individual parks the flexibility to prohibit the operation of drones in high-traffic areas where their operation may overly disturb other park visitors. In this, the proposed rules constitute a reasonable policy that properly balances the interests of wildlife and all park visitors.

I strongly urge you to adopt the proposed drone policy as currently written and to disregard calls from anti-drone interest groups to establish a blanket prohibition on drones in all state parks instead. The proposed rules strike a reasonable balance between user groups and give the agency sufficient flexibility to prohibit drones where they are inappropriate while allowing them everywhere else. This is the proper approach to drone policy, and it is my hope that if the proposed rules are adopted they may serve as a model for other states (such as Colorado) which currently have more restrictive policies toward flying drones in state parks. Thank you for your consideration.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

David Crowell

fdcrowell@gmail.com

Public comment:

I support no drones in state parks. Neither takeoffs or landings from within or flyovers originating outside the park. More people go there for peace and quiet than go there to fly drones.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Cliff Self

mcleoud151@gmail.com

Public comment:

As a lawn enforcement officer, as well as a resident at the Oregon coast (near a very major tourist beach/park), I applaud your efforts to balance public safety and enjoyment with the rights of those who wish to fly their drones for commercial or recreational purposes. These rules seem fair and show that we can all work together to enjoy our great state's beauty.

Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Brent Skorup

bskorup@mercatus.gmu.edu

Public comment:

Greetings,

I'd like to submit the attached document as a public comment to OPRD's inquiry about drone rules. There's a common misreading of federal law when it comes to airspace regulation that OPRD should avoid. The attached, forthcoming Akron Law Review article, "Drone Technology, Airspace Design, and Aerial Law in States and Cities," corrects the common misreading regarding federal authority:

The 1926 Air Commerce Act was passed by Congress to bring some order to the regulation of interstate and foreign air services. Included in that Act was a declaration of "complete sovereignty of the airspace over the lands and waters of the United States." Read in isolation, this provision, to the uninitiated, could be misinterpreted as a nationalization of airspace against state and local powers. One can readily dismiss that interpretation. The idea that this was a declaration against the states was repudiated by the law's drafters, the Senate legislative counsel, and, nearly 20 years later, by the Supreme Court [in Braniff Airways v. Nebraska St. Board of Equalization & Assessment, 347 U.S. 590 (1954)].

States have authority to regulate what occurs in low-altitude airspace and typically do so using trespass, privacy, and nuisance laws. More to the point, many states have created drone no-fly zones above "sensitive infrastructure." While the case was not published in time to be included in the attached article, in the only court decision on the subject, a federal district court rejected the argument that states are preempted by federal law from creating drone no-fly zones. In 2020 a federal district court dismissed with prejudice the federal preemption claims made by drone operators. See Nat'l Press Photographers Ass'n v. McCraw, 504 F. Supp. 3d 568 (W.D. Tex. 2020).

Best, Brent

Brent Skorup Senior Research Fellow Mercatus Center at George Mason University

Visiting Faculty Fellow Nebraska Governance and Technology Center, University of Nebraska College of Law

Drone Technology, Airspace Design, and Aerial Law in States and Cities

Brent Skorup

MERCATUS WORKING PAPER

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3434 Washington Blvd., 4th Floor, Arlington, Virginia 22201 www.mercatus.org Brent Skorup. "Drone Technology, Airspace Design, and Aerial Law in States and Cities." Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, December 2020.

Abstract

Federal and state governments have embraced drone technology in recent years to stimulate a domestic industry for new jobs and long-distance delivery services. However, the federal-state breakdown about who manages drone airspace has not been resolved, which, as the Government Accountability Office recently reported to Congress, threatens the progress of the US drone industry. What is clear is that landowners, whether public or private, own low-altitude airspace and air rights. This article traces the legal treatment of surface airspace as real property back to Anglo-American legal treatises and court decisions in the mid-19th century. Therefore, absent a revolution in property and government takings law, state and city authorities will play a major role in demarcating drone highways, as well as creating time, place, and manner restrictions such as time-of-day rules, noise maximums, and privacy protections. This paper proposes a cooperative federalism system of airspace leasing above public roads to avoid most nuisance, trespass, and takings lawsuits from residents. Finally, this paper proposes a legal presumption establishing an altitude where private air rights end and federally managed airspace begins.

JEL codes: H44, H77, K11, K23, L93, L98, R4

Keywords: aviation, drones, property rights, property law, federalism, regulation, leasing, airspace, innovation, technology, legal history

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Drone Technology, Airspace Design, and Aerial Law in States and Cities

Brent Skorup

Introduction

In the summer of 2015, a polarizing scenario involving guns, property rights, and technology unfolded at William Merideth's Kentucky residence. As he, his friends, and his family were grilling in his backyard, Merideth's young daughter alerted him to a small drone flying over the neighborhood. Annoyed, he retrieved his shotgun from his home, and when the drone crossed his property line, he shot it out of the sky. The drone's owner, a neighbor, called the police upon discovering his destroyed drone, and Merideth was arrested and charged under local law for firing a gun in a populated area. At the highly publicized trial in state court, the judge dismissed the charges with a brief statement that Merideth was justified in shooting the drone because of the invasion of privacy.

When asked on a national television news program why he shot the drone, Merideth said that he had called the police when a drone had flown overhead before and the police told him they could do nothing about it.⁴ Merideth said he had done some legal research and concluded (somewhat dubiously, it turns out) that he was within his rights to shoot the drone because of the

¹ Nancy Grace, Man Shoots Down Drone, CNN Transcript, aired Aug. 3, 2015, http://transcripts.cnn.com/TRANSCRIPTS/1508/03/ng.01.html.

² Id.

³ Kieran Corcoran, Victory for Kentucky 'Drone Slayer' Who Took Out Aircraft Flying Over His Home with a Shotgun as Case Against Him Thrown Out of Court, DAILY MAIL, Oct. 25, 2015, https://www.dailymail.co.uk/news/article-3294792/Victory-Kentucky-Drone-Slayer-took-aircraft-home-

https://www.dailymail.co.uk/news/article-3294792/Victory-Kentucky-Drone-Slayer-took-aircraft-home-SHOTGUN.html.

⁴ Grace, *supra* note 1.

1946 Supreme Court aviation case concerning landowner property rights, *United States v. Causby.*⁵

The core dispute in *Boggs v. Merideth*⁶ is one that many Americans have pondered as drones go mainstream: Where does my property line end and drone airspace begin? And *who* gets to decide where that line is located? As drone technology advances and regular flight paths sprout up, local authorities and residents will demand more input over drone operations. Air rights are bought and sold in traditional real estate but also have growing relevance for specialized infrastructure,⁷ including drone routes. As one scholar recently asked: "What policies are best suited to allocate airspace among its increasingly complex array of competing uses?"

The Causby case, discussed later in this paper, recognized the traditional principle that landowners own surface—but not high-altitude—airspace above their land. The 1946 decision and its antecedents made aviation litigation more predictable—airports were compelled to purchase avigation easements from neighboring property owners. However, as Merideth's case illustrates, drones create new controversies about property rights, nuisance, and government takings. State legislatures and state real estate bars are beginning to draft legislation that protects landowners from intrusions by low-flying drones. Many states have created drone no-fly zones

⁵ Grace, *supra* note 1 ("[After the police] tell me there's nothing they can do because there's no laws against it, I did some research. In 1946, Causby v. U.S. Government [*sic*], Mr. Causby sued the U.S. government for flying mail planes over his property and won."). *See* United States v. Causby, 28 U.S. 256 (1946).

⁶ John David Boggs v. William H. Merideth, No. 3:16-CV-00006-TBR (W. D. Ky), Memorandum Opinion, https://law.justia.com/cases/federal/district-courts/kentucky/kywdce/3:2016cv00006/96944/20/.

⁷ See Troy A. Rule, Airspace in A Green Economy, 59 UCLA L. REV. 270 (2011).

⁸ *Id.* at 274.

⁹ See, e.g., Matt Reynolds, ABA House of Delegates Passes Resolution on Drones; Delegate Calls It "a Hot Topic," ABA JOURNAL, Feb. 17, 2020 (noting that the American Bar Association will begin "lobbying for regulations that would help prevent operators of the unmanned aircraft from trespassing on private property"), https://www.abajournal.com/news/article/resolution-111. In 2019, the American Law Institute's drafters of the Restatement of the Law Fourth, Property applied principles of trespass law in a new section proposed for drone flights. See Virginia K. Trunkes, Balancing New Technology and Privacy When Using Drones in Land Use and

and Texas is currently defending its power to prohibit drones in surface airspace surrounding state land and sensitive locations.¹⁰

There is a way forward: to open up millions of miles of new drone highways while still protecting landowner property rights, public officials should lease corridors of airspace above the public rights-of-way. There is legal precedent, and there are federal and state statutes allowing rights-of-way airspace leasing. That framework requires *cooperative federalism* between federal and state aviation officials; some responsibilities for airspace design and management should be devolved to states and cities, much like some regulation of telecommunications infrastructure and roadways is devolved locally.

This paper first outlines the history of federal and state regulation of low-altitude airspace and aviation. Second, this article explains the litigation risks of federal and state officials allowing widespread low-altitude commercial drone flights above private land. This article proposes airspace leasing above public rights-of-way not only to avoid landowner lawsuits but also to do the following:

- 1) Open up potentially millions of miles of drone routes.
- 2) Allow market allocation of a scarce natural resource (surface airspace).
- 3) Allow government entities to monetize public right-of-way use and gain passive income.

Construction, NAT'L L. REV., May 26, 2020, https://www.natlawreview.com/article/balancing-new-technology-and-privacy-when-using-drones-land-use-and-construction.

¹⁰ Nat'l Press Photographers Assoc. v. McCraw, No. 1:19-cv-00946-RP (W. D. Tex.), Plaintiffs' Complaint for Declaratory and Injunctive Relief 30 (Sept. 26, 2019), https://www.courthousenews.com/wp-content/uploads/2019/09/news-drones.pdf.

Finally, this paper proposes that, in the absence of clarity from Congress, federal and state courts should establish a presumption that the regular flying of drones below a certain altitude amounts to a trespass. This paper suggests an altitude of 200 feet above ground level.

Background of Federal and State Airspace Rules

For years, the debate about the federal and state roles in drone airspace regulation has gone in circles. Aviation, particularly airport management and low-altitude flights, involves a mix of federal and state prerogatives, which are sometimes at odds. For drone flights, the Congressional Research Service noted in a 2013 report to Congress that "[t]his right to travel in navigable airspace came into conflict with the common law idea that each landowner owned the airspace above the surface in perpetuity." Nearly a decade later, Congress has not brought clarity to the federal-state divide over drone airspace issues, even as states increasingly assert their powers over drones and the use of surface airspace and as influential law drafters such as the Uniform Law Commission, American Bar Association, and the American Law Institute draft airspace trespass provisions. American Bar Association, and the American Law Institute draft airspace trespass

Congress has granted the Federal Aviation Administration (FAA) authority over management of *navigable airspace*, ¹⁴ but that leaves major questions unanswered: Who controls

¹¹ The issue of defining aerial trespass for drones at the Uniform Law Commission is entering its fourth year after several controversies and debates over the issue. *See Tort Law Relating to Drones Committee*, UNIFORM LAW COMMISSION, https://www.uniformlaws.org/committees/community-home/librarydocuments?communitykey=2cb85e0d-0a32-4182-adee-ee15c7e1eb20&tab=librarydocuments&LibraryFolderKey=&DefaultView=&page=6.

¹² Alissa M. Dolan & Richard M. Thompson II, Cong. Research Serv., R42940, Integration of Drones into Domestic Airspace: Selected Legal Issues 2 (2013), https://fas.org/sgp/crs/natsec/R42940.pdf.

¹³ See Trunkes, *supra* note 9 ("In 2019, the American Law Institute's (ALI) drafters of the Fourth Restatement of Property applied principles of trespass law in proposing § 1.2A—'Trespass by Overflight.'"); Tort Law Relating to Drones Act § 301(a) (UNIFORM LAW COMMISSION, Proposed Draft for Discussion, 2018).

¹⁴ See Laura K. Donohue, *A Tale of Two Sovereigns: Federal and State Use and Regulation of Unmanned Aircraft Systems in* HANDBOOK OF UNMANNED AERIAL VEHICLES (Kimon P. Valavanis & George J. Vachtsevanos eds., Springer International Publishing AG 2d ed. forthcoming).

non-navigable airspace and surface airspace that landowners own? What are the powers of states and cities over surface airspace used by drone operators?

The federal government's legal perspective on drone federalism is being formulated. In fall 2020, a Government Accountability Office (GAO) report to Congress explained that the US Department of Transportation (USDOT) views all outdoor airspace as navigable airspace for drones, ¹⁵ a view that, if codified, represents a massive expansion of USDOT jurisdiction. At the time of this writing, the USDOT and US Department of Justice are drafting their legal position. ¹⁶

The FAA cannot simply nationalize low-altitude airspace and start authorizing drone flights across backyards, farm fields, and private woodlands around the country. Landowners, states, and cities would object and defend their property rights and constitutional rights. As one federal judge said, in *dicta*, in a 2016 drone case: "the FAA believes it has regulatory sovereignty over every cubic inch of outdoor air in the United States." [I]t is far from clear that Congress intends—or could constitutionally intend—to regulate all that is airborne on one's own property and that poses no plausible threat to or substantial effect on air transport or interstate commerce in general." [1]

¹⁵ US Gov't Accountability Office, B-330570, Unmanned Aircraft Systems: Current Jurisdictional, Property, and Privacy Legal Issues Regarding the Commercial and Recreational Use of Drones B-330570, 6 (2020), https://www.gao.gov/assets/710/709370.pdf ("Although FAA has issued no regulation prescribing minimum safe flight altitudes for [unmanned aircraft systems (UAS)], DOT officials told us 'it is the Department's stance that, for purposes of the definition of the term navigable airspace, zero feet ('the blades of grass') is the minimum altitude of flight for UAS."").

¹⁶ US Gov't Accountability Office, B-330570, Unmanned Aircraft Systems: Current Jurisdictional, Property, and Privacy Legal Issues Regarding the Commercial and Recreational Use of Drones B-330570, 3 (2020), https://www.gao.gov/assets/710/709370.pdf ("Importantly, a task force of attorneys in the DOT Office of the Secretary and FAA . . . is conducting an in-depth review of the Department's legal position regarding federal preemption of state and local laws and other UAS jurisdiction-related issues. . . . DOT officials told us they expect the results of the Working Group to be provided to DOT senior leadership in the coming months.").

¹⁷ Huerta v. Haughwout, No. 3:16-cv-358 (JAM), 2016 WL 3919799, *3 (D. Conn. 2016).

¹⁸ *Id.* at *3.

Many states have expressly asserted sovereignty to surface airspace for decades and are beginning to regulate that airspace. As Stephen Migala points out in a recent law journal article about drones and federalism, several states have created no-fly zones for drones over sensitive areas such as critical infrastructure, schools, sports venues, and prisons. Some cities, likewise, are prohibiting drone flights at low altitudes. The FAA has avoided litigating the issue, but some entities in the drone industry assert that only federal regulators have authority to define where drones operate and where they are prohibited. In particular, they argue that drone no-fly zones "may only be established . . . by the federal government." In October of 2020, some drone advocates petitioned the FAA to preempt these state no-fly zones. As explained later in

¹⁹ DEL. CODE tit. 11, § 1334 (2020) (no operations over events with more than 1,500 people, over incidents with first responders, or over critical infrastructures); FLA. STAT. ANN. § 330.41 (2020) (no operations over critical infrastructures); LA. STAT. ANN. § 14:63 (2020) (defining criminal trespass to include operating a UAS over property of another); LA. STAT. ANN. § 14:108 (2020) (no operations over a police cordon); LA. STAT. ANN. § 14:337 (2020) (no operations over certain facilities, including schools); NEV. REV. STAT. § 493.103 (2020) (no operations under 250 feet over property when owner notifies UAS operator); NEV. REV. STAT. § 493.109 (2020) (no operations over critical facilities); OKLA. STAT. tit. 3, § 322 (2020) (no operations over critical infrastructure facilities); OR. REV. STAT. § 837.380 (2020) (restrictions over property when owner notifies UAS operator); S.D. CODIFIED LAWS § 50-15-3 (2020) (no operations over prisons or military facilities); TENN. CODE ANN. § 39-14-405 (2020) (criminal trespass via UAS over private property in non-navigable airspace); TEX. GOV'T CODE ANN. § 411.062, 411.065 (2020) (restrictions over state Capitol Complex); TEX. GOV'T CODE ANN. § 423.0046 (2020) (restrictions over sports venues); WIS. STAT. § 114.045 (2020) (no operations over a correctional institution). See Stephen J. Migala, UAS: Understanding the Airspace of the States, 82 J. AIR L. & COM. 3, 62–63 (2017).

²⁰ In October 2019, Silverthorne, Colorado, passed an ordinance that generally prohibits drones at heights less than 40 feet above rooftops. John Minor, *Council Agenda Memorandum: Ordinance 2019-19—An Act to Provide for the Regulation of Unmanned Aircraft*, Silverthorne, Colo., Nov. 13, 2019, https://silverthorne.civicweb.net/document/23430/Ordinance%202019-

^{19%20}An%20Ordinance%20to%20Provide%20for%20t.pdf?handle=5FE77E7F0FDB49F6B9AB40D7B25FD153.

²¹ See, e.g., Nat'l Press Photographers v. McCraw, No. 1:19-cv-00946-RP, Brief of Amicus Curiae Assoc. for Unmanned Vehicle Systems International and the Consumer Technology Assoc. 7 (Jan. 10, 2020) (asserting that state laws that "directly limit the operations of UAS in the national airspace" by creating no-fly zones above sensitive locations are preempted by federal regulation).

²² Betsy Lillian, *Drone Industry Responds to Draft Tort Law on "Aerial Trespass,"* UNMANNED AERIAL, July 25, 2018, https://unmanned-aerial.com/drone-industry-responds-to-draft-tort-law-on-aerial-trespass (quote attributed to representatives in the drone industry).

²³ Letter from Alliance for Drone Innovation et al. to FAA Administrator Steve Dickson Re: Implementation of Section 2209 2, (Oct. 22, 2020) (on file with the author).

this paper, states and landowners likely have the power to create no-fly zones at low altitudes, but it is unclear at what altitude state and property owners' powers are extinguished.

Drone litigation is growing, including lawsuits against states and cities for creating no-fly zones and against drone operators for aerial trespass.²⁴ One illustrative case is pending in federal court in Texas.²⁵ Beginning in 2013, the Texas legislature prohibited drone operations that are below 400 feet above the ground and above certain types of property in the state, including any jail, prison, or "critical infrastructure facility."²⁶ Photographers sued in 2019 on several grounds, including that state regulation of drone operations is preempted by federal drone regulations.²⁷ Even the plaintiffs seem unclear about whether states have authority to prohibit low-altitude drone flights and concede in their brief that the state "may promulgate drone regulations consistent with its traditional police powers, such as to protect privacy or prevent trespass or voyeurism."²⁸

States are also beginning to fund and test drone management systems in low-altitude airspace. North Dakota authorized \$28 million in 2019 for a statewide unmanned traffic

²⁴ See Donohue, supra note 14, at 20–22. A Louisiana court in early 2020 convicted a man of criminal trespass (a misdemeanor) under state law for flying a drone with a camera above neighbor's property. The man appears to have violated La. Stat. Ann. § 14:63 (defining criminal trespass to include operating a UAS over property of another). Josh Spires, Drone Pilot Vows Fight After Arrest for Flying over His Neighbor's Home, DRONEDJ, July 6, 2020, https://dronedj.com/2020/07/06/drone-pilot-arrested-and-banned-for-flying-his-drone/. Louisiana law prohibits operating a drone over another's property without permission. In the words of the defendant, "You're not getting help from the FAA. . . . You're on your own." Ken Heron, Jailed and Banned from Owning a Drone (Can They Do That?!), YouTube (July 2, 2020), https://www.youtube.com/watch?v=ufWqRiYRmcA&feature=emb_title (at 10:00).

²⁵ See Silas Allen, *Photojournalists Group Challenges Texas' Drone Law*, DALLAS OBSERVER, Sept. 27, 2019, https://www.dallasobserver.com/news/news-photographers-group-sues-to-have-texas-drone-law-overturned-11766014.

²⁶ Tex. Gov't Code §§ 423.0045–.0046.

²⁷ Nat'l Press Photographers Assoc. v. McCraw, No. 1:19-cv-00946-RP (W. D. Tex.), Plaintiffs' Complaint for Declaratory and Injunctive Relief 30 (Sept. 26, 2019), https://www.courthousenews.com/wp-content/uploads/2019/09/news-drones.pdf ("By banning drone use within the airspace around critical infrastructure and other facilities, Texas is attempting to regulate aviation safety through its No-Fly Provisions.").

²⁸ *Id.* at 29.

management (UTM) system.²⁹ Ohio's drone task force director says they hope to have a statewide UTM system in the next few years.³⁰ The federal policy for traditional aviation, which will likely extend to drone aviation, is that local airport operators, whether public or private, assume any liability related to trespass, nuisance, and takings lawsuits from affected landowners.³¹ Landowners, particularly commercial landowners,³² are likely to resist and sue over frequent drone flights over their land. This legal uncertainty about whether drones can fly at low altitudes over private property raises the prospect that drone operators will face costly lawsuits and statewide injunctions.

Legal History of Airspace Regulation

Airspace as Property

Low-altitude airspace "is a complex and oft-forgotten natural resource"³³ and a monetizable asset bearing the hallmarks of property.³⁴ In his influential property rights work in the 1960s, Harold Demsetz identified an economic phenomenon: technology shocks create demand for novel assets,

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AIR L. & COM. 91, 91 (1981).

Harold Demsetz, Some Aspects of Property Rights, 9 J.L. & ECON. 61, 67 (1966) (emphasis in original).

²⁹ Patrick Groves, *North Dakota Plans Statewide Drone Air Traffic Control*, GOVERNMENT TECHNOLOGY, June 10, 2019, https://www.govtech.com/products/North-Dakota-Plans-Statewide-Drone-Air-Traffic-Control.html.

³⁰ Brian Garrett-Glaser, *At Ohio Air Taxi Symposium, Policy Seen as Far Behind Technology*, AVIATION TODAY, Mar. 3, 2020, https://www.aviationtoday.com/2020/03/03/ohios-grand-plans-urban-air-mobility/.

³¹ The airport operator bears the cost of acquiring the necessary clearance zones to comply with the FAA standards. The federal policy, as a New York state court summarized it, is "not to have the Federal Government assume any liability relative to takeoff and landing rights." Kupster Realty Corp. v. State, 93 Misc. 2d 843, 849 (Ct. Claims N.Y. 1978).

³² As one property scholar notes:

Air rights are frequently the most valuable rights connected with the ownership of commercial land since the value of such property consists principally of the owner's right to erect buildings in the airspace.

Mark H. Allen, The Federal Income Tax Consequences of Commercial Conveyances of Rights in Airspace, 47 J.

³³ Troy A. Rule, Airspace and the Takings Clause, 90 WASH. U. L. REV. 421, 425 (2012).

³⁴ Demsetz presaged the competition for low-altitude airspace in a 1966 article:

In the case of lower airspace, we are dealing with the problem of whether or not the right to use or own lower airspace should be involuntarily *reassigned*. The existence of serious competing claims to the use of lower airspace should create doubt about our ability to judge which use is most valuable and, hence, should lead us to rely to a larger extent on voluntary negotiations between competing claimants and landowners.

and property rights emerge to coordinate increased use of the asset.³⁵ This Demsetz phenomenon has been documented for many previously lightly used resources that became *propertized*, including the Great Plains circa 1870,³⁶ Native American lands in colonial Canada,³⁷ and pre-1927 radio spectrum.³⁸ A similar story can be traced in surface airspace.

Airspace as property, including airspace sales and leasing, has a long pedigree in American law. In the 19th and early 20th centuries, most Anglo-American courts and property theorists rejected the view that "land" projected infinitely upward.³⁹ Courts cited the *ad coelum* maxim—"Land hath also, in its legal signification, an indefinite extent, upwards as well as downwards"—frequently in trespass cases but often denied that there could be a trespass or a property interest in airspace that was not practically usable by the landowner.⁴⁰ As a court in Minnesota said in a 1923 aerial trespass case, "[W]hen, as here, the air is to be considered at an altitude of two thousand feet or more, to contend that it is part of the realty . . . is only a legal fiction, devoid of substantial merit."⁴¹

³⁵ Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350 (1967). *See also* Terry L. Anderson & P. J. Hill, *The Evolution of Property Rights: A Study of the American West*, 18 J.L. & ECON. 163, 170–72 (1975) (showing that it became economical for cattlemen, for instance, to fence off the Great Plains as land value increased and the cost of defining property rights decreased from 1860 to 1900).

³⁶ Anderson & Hill, *supra* note 35, at 170–72.

³⁷ Around 1700, Native Americans near Quebec divided their hunting land because of increased demand for animal fur. Demsetz, *supra* note 35, at 351–53.

³⁸ See, e.g., Thomas W. Hazlett, *The Rationality of U.S. Regulation of the Broadcast Spectrum*, 33 J.L. & ECON. 133, 143–44 (1990) ("There existed a very lively market in broadcast properties, sold with frequency rights attached, early in the development of the industry (that is, pre-1927).").

³⁹ The famous *ad coelum* maxim is that "[1]and hath also, in its legal signification, an indefinite extent, upwards as well as downwards." 2 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND: IN FOUR BOOKS 18 (1818). The Supreme Court in *United States v. Causby* somewhat exaggerated "*indefinite* extent" in this maxim to mean something like "*infinite* extent." United States v. Causby, 328 U.S. 256, 260 (1946) (characterizing *ad coelum* as the "ancient doctrine that at common law ownership of the land extended to the periphery of the universe").

⁴⁰ One legal scholar noted in 1910:

[[]I]t is curious to note that even as late as the early part of the last [that is, 19th] century, there was considerable doubt as to whether trespass would lie, where there was no tangible interference with the land, but only with the airspace."Arthur K. Kuhn, *The Beginnings of an Aërial Law*, 4 Am. J. INT'L L. 109, 123 (1910).

⁴¹ Johnson v. Curtiss N. W. Airplane Co., 1928 U. S. Av. R. 42, 43–44 (Dist. Ct., Ramsey Co., Minn. 1923).

The surface airspace, however, have long been treated by courts as real property. ⁴² Anglo-American legal treatises from the 1840s onward note that property could be partitioned horizontally ⁴³ and that airspace—the "upper chamber" of a parcel of real estate—could be owned separately from the surface property. ⁴⁴ In the mid-1800s, the Illinois Supreme Court "took it for granted that there could be a horizontal severance of ownership in a building, with the ground floor owned by one person, and the upper portion of the building by another 'in fee." ⁴⁵ Perhaps the first Anglo-American statute recognizing landowners' exclusive rights to surface airspace is The Telegraph Act of 1863 in England, which codified landowners' right to object to the construction of a telegraph line hanging above their property. ⁴⁶ This principle was mirrored in American law in a 1906 trespass case, *Butler v. Frontier Telephone Co.*, dealing with a telephone

⁴² A New York court in 1906, for instance, allowed for the ejectment of a telephone line above property but warned that "this [*ad coelum* maxim] may not be taken too literally." Butler v. Frontier Telephone Co., 186 N.Y. 486, 491, 79 N.E. 716 (1906). See also Johnson v. Curtiss N. W. Airplane Co., 1928 U.S. Av. R. 42, (Dist. Ct., Ramsey Co., Minn. 1923) ("The air, so far as it has any direct relation to the comfort and enjoyment of the land, is appurtenant to the land, and no less the subject of protection than the land itself").

⁴³ JOHN B. PHEAR, A TREATISE ON RIGHTS OF WATER 2 (V. & R. Stevens and G. S. Norton 1859) ("[T]he partition [of land] may be carried on in a vertical, as well as in a horizontal direction").

⁴⁴ See SILAS JONES, AN INTRODUCTION TO LEGAL SCIENCE 179 (J. S. Voorhies 1842) (noting exceptions to *ad coelum*) ("[F]or instance, a man may have an inheritable corporeal property in an upper chamber, though the lower stories and soil may belong to another. This, it is true, is as much as saying a man may have land by owning an upper chamber, or in other words, that an upper chamber is land!"); JOSEPH A. SHEARWOOD, A CONCISE ABRIDGMENT OF THE LAW OF REAL PROPERTY AND AN INTRODUCTION TO CONVEYANCING 2 (Stevens & Sons 1878) ("One man therefore may have a house in fee and another the ground in fee; or if the house is subdivided in chambers there may be different owners in fee to each set."). As one treatise noted:

The English law is different [from the absolute ownership principles in Roman law], permitting one man to own the

The English law is different [from the absolute ownership principles in Roman law], permitting one man to own the surface, another to own a mining substratum, while still a third owns a horizontal flat in the structure erected upon the land. Accordingly, I say, the adoption of a zone theory would be quite in harmony with the general spirit of the English land law as regards these horizontal hereditaments.

Harold D. Hazeltine, The Law of the Air 75 (Univ. of London Press 1911).

⁴⁵ Theodore Schmidt, *Public Utility Air Rights*, 1 J. AIR L. & COM. 52, 63 (1930) (citing McConnel v. Kibbe, 29 Ill. 483 (1852); McConnel v. Kibbe, 33 Ill. 175 (1864)).

⁴⁶ Telegraph Act 1863, ch. 112, § 22 ("[T]he [telegraph] Company shall not place a Telegraph above Ground . . . or place a Telegraph above Ground across an Avenue or Approach to a Dwelling House" unless "in each Case [the company] obtain the Consent of the" occupier, lessee, or owner.). *See also* JOHN F. CLERK & W. H. B. LINDSELL, LAW OF TORTS 291 (2d ed., Sweet & Maxwell 1896) ("The provisions of the Telegraph Act, 1863 . . . are based upon the assumption that there is a right of property in the air space) (citing Telegraph Act of 1863, ch. 112).

line 30 feet above private land: "The law regards the empty space as if it were a solid, inseparable from the soil, and protects it from hostile occupation accordingly." ⁴⁷ As one contemporaneous treatise noted: "It follows from this [ad coelum principle] that land may be divided horizontally as well as vertically, and the owner of land may divide and sell the space above the surface . . . as well as he can divide the surface into city lots." ⁴⁸

Building construction innovations at the turn of the century increased the value of low-altitude airspace—the economic phenomenon Demsetz identified—because high-rises and skyscrapers could now occupy airspace above urban land. New York's 1916 zoning law, imitated around the country, was the first to limit building size by volume—height and setback rules—and this accelerated the propertization of airspace in cities. Airspace sales and transfers began in earnest in the 1920s, so especially after development of the Merchandise Mart in Chicago recorded the first "air lot." This air lot lease above the Chicago railroad terminal derived from common law principles of land partition. The growing airspace marketplace led a former president of the American Bar Association to remark in 1930: "This practice of the owner retaining the use of the surface of his land and leasing or selling air space above is becoming increasingly common and obtains in many of our large cities."

⁴⁷ Butler v. Frontier Telephone Co., 79 N.E. at 718.

⁴⁸ John G. Hawley & Malcolm McGregor, A Treatise on the Law of Real Property 5 (Collector Pub. Co. 1900).

⁴⁹ See Theodore Stein, Slide Mountain: Or, the Folly of Owning Nature 146 (U. Cal. Press 1995) (noting change after passage of the 1916 law) ("[A]irspace, a three-dimensional abstraction, became a *thing* that could be owned and sold." (Emphasis in original.)).

⁵⁰ *Id.* at 148 ("Transferring air was nothing new in New York. The city had permitted the shifting of air rights from lot to lot to build higher towers at various times since the 1920s.").

⁵¹ Schmidt, *supra* note 45, at 68.

⁵² *Id.* at 68 (1930). A 1929 conveyance of air rights in Boston was done using common law principles. *Id.* at 70–71.

⁵³ *Id.* at 54 (1930) (quoting a former American Bar Association president).

By the 1960s, condominium laws simplified the process of demarcating fee simple interests in land in a vertical column.⁵⁴ The creation and sale of airspace tracts separate from the land was routine.⁵⁵ In the decades since, treatment of airspace and airspace lots vary under state law, though they are treated as a form of real property.⁵⁶

Early Aviation and State Sovereignty Over Airspace

Early aviation law, therefore, was grafted onto this tradition of treating surface airspace as real property. State and local governments asserted their authority over airspace soon after the Wright brothers unveiled their invention. The world's first aviation legislation is believed to be the municipal ordinance passed by the Kissimmee, Florida, town council in 1908.⁵⁷ The law claimed jurisdiction over airspace above town up to 20 miles in the sky.⁵⁸ Massachusetts was regulating

⁵⁴ See Douglas C. Harris, Condominium and the City: The Rise of Property in Vancouver, 36 L. & Soc. INQUIRY 694, 695 (2011).

⁵⁵ Note, *Conveyance and Taxation of Air Rights*, 65 COLUM. L. REV. 338, 339 (1964) ("[I]t seems reasonably clear that an owner may effectively convey 'tracts' of space that are physically unattached to the land."). The ABA published the Model Airspace Act in 1972, which formalized airspace propertization, but only Oklahoma appears to have adopted significant portions of the act. *See* Subcommittee on Airspace Utilization and Multiple Use, Committee on New Developments in Real Estate Practice, *Final Draft of Model Airspace Act*, 7 REAL PROP., PROB. & TR. J. 353 (1972); 60 OKLA. STAT. tit. 60, § 60-802 et seq.

⁵⁶ See, e.g., VA. CODE ANN. § 55.1-1900 (2020) (defining "land" as "a three-dimensional concept"); Macht v. Dep't of Assessments, 266 Md. 602, 611–12, 296 A.2d 162 (1972) (holding that for assessment purposes, airspace is treated like a negative easement for a term of years); 68 PA. STAT. § 802 (2020) ("[R]ights and interests in air space . . . shall be dealt with for all purposes and in all respects as estates, rights and interests in real property"); In re Appeal of Bigman, 110 Pa. Commw. 539, 547 (1987) ("Although air space does not fit squarely within either of these definitions, we conclude that it is more closely aligned with 'buildings' than with 'land.'). But see Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978) (holding that air rights do not constitute real property in the context of regulatory takings).

⁵⁷ See HAZELTINE, supra note 44, at 47–48 ("A little town in Florida has already passed an ordinance relative to traffic in the air, claiming jurisdiction as high as twenty kilometres [sic], and asserting that it proposes to establish an aerial police!").

⁵⁸ Among other things, the ordinance required aircraft to travel at slow speed at low altitudes, prohibited occupants from throwing debris from an aircraft in flight, and required an annual license fee. John R. Tamm, The Status of States' Rights in the Airspace of the United States: The Sovereign Powers of and the Powers Exercised by the Several States at Airports and in the Airspace Superjacent to Their Territory 251, Appendix 1 (Mar. 1978) (unpublished dissertation, McGill University) (including section 1 of Kissimmee's Aircraft Ordinance, adopted 1908).

flight and prohibiting flight over crowded areas in 1913.⁵⁹ Low-altitude airspace was viewed as part of the underlying land, over which state governments had sovereignty. Harold Hazeltine, in his 1911 air law treatise, noted the following:⁶⁰

[A]ir above a land has such a close relationship to the lanyd that it may be looked upon as an appurtenance of the territorial state or even as a part of the territorial state. . . . It is quite clear, I think, that states exercise a right of sovereignty in the lowest stratum of the air-space, that stratum, namely, occupied by buildings and other structures with the encircling atmosphere.

Beginning in the 1920s, after the drafting of the Uniform State Law for Aeronautics, states began codifying their claims of sovereignty over surface airspace against the federal government.⁶¹ At least 19 states have these laws today.⁶² Until the 1950s, airport andyairspace regulation had a local character that was tolerated and even encouraged by federal law.⁶³

⁵⁹ See Smith v. New England Aircraft Co., 270 Mass. 511, 519 (1930).

⁶⁰ HAZELTINE, *supra* note 44, at 15, 46–47 (distinguishing air from the sea). Although Hazeltine is speaking of nations when referring to "states," in the United States land and territory are generally held and regulated by subnational states upon joining the union.

⁶¹ Section 2 of the 1922 Uniform State Law for Aeronautics provided:

Sovereignty in the space above the lands and waters of this State is declared to rest in the State, except where granted to and assumed by the United States pursuant to a constitutional grant from the people of this State.

National Conference of Commissioners on Uniform State Laws, Uniform State Law for Aeronautics, Conference, San Francisco, CA, August 2–8, 1922.

⁶² ARIZ. REV. STAT. § 28-8206 (2020); CAL. PUB. UTIL. CODE § 21401 (2020); COLO. REV. STAT. § 41-1-106 (2020; DEL. CODE tit. 2, § 302 (2020); HAW. REV. STAT. ANN. § 263-2 (2020); IDAHO CODE § 21-202 (2020); IND. CODE ANN. § 8-21-4-2 (2020); ME. REV. STAT. tit. 1, § 6 (2020); MD. CODE ANN., TRANSP. § 5-104 (2020); MINN. STAT. § 360.012 (2020); MONT. CODE ANN. § 67-1-202 (2019); NEV. REV. STAT. ANN. § 493.030 (2019); N.C. GEN. STAT. § 63-11 (2019); N.D. CENT. CODE § 2-03-02 (2019); N.J. STAT. § 6:2-4 (2020); TENN. CODE ANN. § 42-1-102 (2020); UTAH CODE ANN. § 72-10-123 (2020); WIS. STAT. § 114.02 (2020); WYO. STAT. § 10-4-301 (2020). South Carolina, South Dakota, and Vermont repealed their airspace sovereignty statutes in 2012, 2014, and 1997, respectively. See S.C. CODE ANN. § 55-3-30 (repealed 2012); S.D. CODIFIED LAWS § 50-13-2 (repealed 2014); VT. STAT. ANN. tit. 5, § 401 (repealed 1997).

⁶³ Janet R. Daley Bednarek, in her history of early American airports, notes that by 1926, "it had been fairly firmly, but not exclusively established, that local governments (primarily cities, but sometimes counties or city-county combinations), with or without federal aid, would take the lead in building the nation's airports." JANET R. DALEY BEDNAREK, AMERICA'S AIRPORTS: AIRFIELD DEVELOPMENT, 1918–1947 15 (Tex. A. & M. Univ. Press 2001). The California Supreme Court rule in *Parker v. James Granger, Inc.* in 1935 refused to consider applying federal aviation laws in the case because "under the federal Constitution and the California Aircraft Act enacted in 1929 the state of California was vested with exclusive power to prescribe air traffic rules to govern the operation of aircraft flying in purely intrastate flights." Parker v. James Granger, Inc., 4 Cal.2d 668, 677 (1935).

There was notable resistance from aviators to airspace ownership and state sovereignty. Stuart Banner notes in his history of airspace regulation that the aviation industry sought to eliminate the concept of owning airspace in the early 20th century.⁶⁴ In the debates over the drafting of the influential Uniform State Law for Aeronautics in 1922 and the Restatement of Torts in 1934, aviators lost both battles to real estate and property advocates.⁶⁵ The Uniform State Law for Aeronautics allowed flights if they did not interfere with the "then existing use" of the property.⁶⁶ In tort law, flight over property at low altitude was a privilege subject to landowners' right of exclusion.⁶⁷

The sale and lease of private airspace in dense cities is frequently covered in news stories;⁶⁸ less attention is paid to the market for public airspace. With this sovereignty and property in hand, state departments of transportation (DOTs) began leasing public airspace—typically above the right-of-way—in earnest in the 1970s and 1980s as a revenue source.⁶⁹ The legal mechanisms for state DOT leasing of airspace is discussed later in this paper because it is a potentially groundbreaking way to greenlight and safely manage widespread commercial drone services. The contemporary federal aviation legislation must be approached and interpreted with these earlier sovereignty and property understandings in mind.

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⁶⁴ See, e.g., Stuart Banner, Who Owns the Sky?: The Struggle to Control Airspace from the Wright Brothers On 185–97 (Harvard Univ. Press 2008).

⁶⁵ See, e.g., id. at 185–97.

⁶⁶ Uniform State Law for Aeronautics, *supra* note 61, at § 4.

⁶⁷ BANNER, *supra* note 64, at 197 ("According to the *Restatement of Torts*, landowners owned their airspace, subject only to a privilege of reasonable flights at reasonable heights.").

⁶⁸ See, e.g., Charles V. Bagli, With \$240 Million Deal, Floodgates Open for Air Rights in Midtown East, N.Y. TIMES, Mar. 2, 2018, https://www.nytimes.com/2018/03/02/nyregion/jp-morgan-chase-midtown-east-air-rights.html.

⁶⁹ Stephen S. Roop & Sondip Mathur, *Leasing of TxDOT's Rights-of-Way* 2 (Texas Transportation Institute, Texas A. & M. University, Research Report 1329-1F, 1993), https://static.tti.tamu.edu/tti.tamu.edu/documents/1329-1F.pdf.

Federal Sovereignty Over Airspace Is Not Nationalization of Airspace

The 1926 Air Commerce Act was passed by Congress to bring some order to the regulation of interstate and foreign air services. Included in that Act was a declaration of "complete sovereignty of the airspace over the lands and waters of the United States." Read in isolation, this provision, to the uninitiated, could be misinterpreted as a nationalization of airspace against state and local powers.

One can readily dismiss that interpretation. The idea that this was a declaration against the states was repudiated by the law's drafters,⁷¹ the Senate legislative counsel,⁷² and, nearly 20 years later, by the Supreme Court.⁷³ Migala notes in his examination of the major federal aviation laws in 1926, 1938, and 1958 that it is "exceedingly clear that Congress used this section to declare sovereignty only internationally; it did not intend to trample on the sovereignty of states' airspace rights."⁷⁴ According to contemporaneous congressional records, "The

⁷⁰ Air Commerce Act of 1926, Pub. L. No. 69-254, 44 Stat. 568, § 6 (1926). In 1938, this declaration was amended somewhat, though it was still interpreted to mean sovereignty against foreign nations. *See* Donohue, *supra* note 14, at 35–36.

⁷¹ Senator Hiram Bingham, one of the drafters of the law, confirmed that the act made "no interference with municipal or State regulation." 67 Cong. Rec. 9355 (1926) (statement of Sen. Bingham) ("None whatever.").
⁷² In his influential legal brief to the U.S. Senate about the 1926 Air Commerce Act, Senate legislative counsel Frederic P. Lee noted that the sovereignty provisions left surface air rights unaffected: "It is true that the principle of exclusive Federal sovereignty in the air domain *above the surface air space*, rests the validity of such diverse State regulations (so far as they apply to the upper strata of air space) only upon the consent of the Federal Government rather than upon a State power which may be exercised irrespective of the action of the Federal Government."
Frederic P. Lee, The Air Domain of the United States, Legislative Counsel, U.S. Senate (1926) (emphasis added), reprinted by General Printing Office, Civil Aeronautics, Legislative History of the Air Commerce Act of 1926, 104 (1928).

⁷³ The Court in *Braniff Airways* rejected the claim that the sovereignty provision nationalized airspace against the states: "The provision pertinent to sovereignty over the navigable air space in the Air Commerce Act of 1926 was an assertion of exclusive national sovereignty. The convention between the United States and other nations respecting international civil aviation . . . accords. The Act, however, did not expressly exclude the sovereign powers of the states. . . . These Federal Acts regulating air commerce are bottomed on the commerce power of Congress, not on national ownership of the navigable air space, as distinguished from sovereignty." Braniff Airways v. Nebraska St. Board of Equalization & Assessment, 347 U.S. 590, 595–96 (1954).

⁷⁴ Migala, *supra* note 19, at 15.

[sovereignty] section in nowise affects the apportionment of sovereignty as between the several States and the United States, but only as between the United States and the rest of the world."⁷⁵

The 1926 act went so far as to permit, in section 4, "airspace reservations" by the states. The crucial implication of this statute, one legal observer noted, is that "sovereignty [over surface airspace] was acquired by a State before it was admitted into the Union and was retained afterward, or sovereignty was acquired subsequent to statehood." In 1958, Congress updated the aviation statutes with the Federal Aviation Act. Airspace was becoming scarcer, and collisions more likely, as civil and military operators competed for use. Section 4 of the 1926 Act, which recognized the power of states to make airspace reservations, was dropped. As Migala notes, throughout the hearings and reports preceding the 1958 Federal Aviation Act, there was no discussion of state power to make airspace reservations.

⁷⁵ STAFF OF H. COMM. ON INTERSTATE AND FOREIGN COMMERCE, 69TH CONG., CIVIL AIR NAVIGATION 8 (Comm. Print 1926) (to accompany S. 41, 69th Cong.). For similar statement, see H.R. REP. No. 1262, 68th Cong., at 19 (1925). Colonel W. Jefferson Davis, for instance, represented the War Department at the Congress on International Aviation Legislature, and he writes in his 1930 casebook, *Aeronautical Law:* "The question of sovereignty as between the Federal government and the states is not solved by the [1926] Federal Air Commerce Act. The declaration of sovereignty [in the 1926 Act] is only with regard to international relations." W. JEFFERSON DAVIS, AERONAUTICAL LAW 128 (1930).

⁷⁶ The original House bill for what became the 1926 Air Commerce Act included a provision authorizing the Secretary of Commerce to regulate aircraft and pilots in intrastate commerce. 67 Cong. Rec. 9354 (1926) (statement of Sen. Bingham). In the compromise bill that passed, that authority over intrastate aircraft and pilots was stripped out and replaced by a section that expressly protected state powers over low-altitude airspace. *Id.* (statement of Sen. Bingham). The law that eventually passed permitted states, in section 4, to make "airspace reservations," in order that they may preclude low-altitude flights over cities and sports venues. Air Commerce Act of 1926, 44 Stat. 570, of the (repealed in 1958); see 67 Cong. Rec. 9355 (1926) (statement of Sen. Bingham). In debating the airspace reservations issue, Sen. Bingham conceded that hypothetically, states had the power under the bill to exclude interstate commerce from the airspace reservations. 67 Cong. Rec. 9355 (1926) (statement of Sen. Bingham).

⁷⁷ Armine C. Ernst, Possible Impact of the Tidelands Decisions on Airspace Sovereignty, 7 Sw. L.J. 280, 284 (1953) (emphasis added).

⁷⁸ Federal Aviation Agency Act: Hearings Before the Subcomm. on Aviation of the S. Comm. on Interstate & Foreign Commerce, 85th Cong. 151 (1958) (statement of E. R. Quesada, Chairman, Airways Modernization Board).

⁷⁹ Migala notes the following: "Throughout the hearings for the 1958 Act, and in all of the accompanying reports and testimony that make up the comprehensive legislative history, at no time was there any discussion about states' rights to enact airspace reservations under § 4." Migala, *supra* note 19, at 59.

Nevertheless, this omission of section 4 cannot be interpreted as a nationalization of all airspace against state powers. First, in 1958, Congress was surely familiar with the express holding of the 1946 *Causby* case that federally approved air routes must yield to property rights at low altitudes. Further, state powers over surface airspace were not extinguished because the Federal Aviation Act of 1958 added a "savings clause" that preserved the effect of state laws, including "the remedies now existing at common law or by statute." Now this paper turns to the legal treatment of surface airspace and the remedies at common law and state law.

Causby and Landowners' Airspace as Property

During World War II, the government condemned and acquired a wedge of airspace from a few property owners adjacent to a military airport in Louisiana so that airplanes were guaranteed an unobstructed glide path to the runway.⁸¹ For reasons lost to history, the US government made no such compensation to the Causbys, farmers in North Carolina, before converting a small local airport bordering the Causbys' chicken farm into a military airport. The Causbys challenged

⁸⁰ 49 U.S.C.A. § 1506 (1988) (codified as amended at 49 U.S.C. § 40120(c)). In 1994, Congress engaged in a recodification of the Federal Aviation Act, and the savings clause now reads: a "remedy under this part is in addition to any other remedies provided by law." Courts, scholars, and contemporaneous congressional records hold that this recodification was not intended to effect a substantive change from the predecessor statutes. *See, e.g.*, the Florida Supreme Court's comment on the issue:

Congress expressly stated that a recodification of the federal aviation statutes that occurred in 1994, which included renumbering section 1506 as section 40120(c), was *not intended to substantively change those statutes*.

Vreeland v. Ferrer, 71 So. 3d 70, 77 n.3 (Fla. 2011) (citing 1994 U.S.C.C.A.N. 818) (emphasis in original). See also Massachusetts v. United States, 435 U.S. 444, 473 (1978) (Rehnquist, J., dissenting) ("The United States does not 'own' the airspace above its territorial boundaries, although it undoubtedly has considerable authority to regulate the use of that airspace."). As the Colorado Supreme Court recognized in a 1994 case about airspace management, the Federal Aviation Act contains no explicit preemption of local regulation of air traffic and airspace management. This was a banner ad case. The court did find, however, that the local regulations were preempted because towing objects was within the exclusive domain of the federal government. The court also found that the ordinance was preempted because it "stands as an obstacle" to the purposes and objectives of Congress. Banner Advertising, Inc. v. People of the City of Boulder, 868 P.2d 1077, 1084 (Colo. 1994).

⁸¹ The easement to the airspace began at 25 feet above the ground and continued for 15 years, or until the war concluded. United States v. 357.25 Acres of Land in Calcasieu Parish, 55 F. Supp. 461, 461 (W.D. La. 1944).

Army flights over their property as an unconstitutional taking, a famous property rights case decided by the Supreme Court in 1946.

The low-altitude flights of bomber planes terrified the Causbys—one errant Army aircraft missed a landing and killed their neighbors, a mother and three children. Ref. The constant airplane noise, which killed nearly 150 of the Causbys' chickens, had destroyed their livelihood. The Supreme Court agreed with the Causbys that low-altitude flights could amount to a taking under the Fifth Amendment. The *Causby* case also formalized longstanding trends in the law discussed earlier and, in particular, the idea that there are two layers of airspace: a high-altitude layer that the federal government largely controls and a low-altitude layer largely under control of landowners and US state powers.

In *Causby*, the federal government argued (a) that flights at low altitude, if within "navigable airspace," cannot amount to a taking⁸⁴ and (b) that landowners do not own surface airspace—the "superadjacent airspace"—except that occupied by buildings.⁸⁵ The Supreme Court rejected both arguments.

In rejecting the government's first argument, the Court held that "the flight of airplanes, which skim the surface but do not touch it, is as much an appropriation of the use of the land as a

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⁸² BANNER, *supra* note 64, at 229.

⁸³ *Id.* at 229.

⁸⁴ United States v. Causby, 328 US 256, 260 (1946) ("It is, therefore, argued [by the federal government] that since these flights were within the minimum safe altitudes of flight which had been prescribed, they were an exercise of the declared right of travel through the airspace. The United States concludes that when flights are made within the navigable airspace without any physical invasion of the property of the landowners, there has been no taking of property."). "None of [the Justices] cared that federal law had defined as navigable airspace the area in which the planes flew over the Causbys' land." BANNER, *supra* note 64, 250.

⁸⁵ Causby, 328 U.S. at 260 ("[The United States] also argues that the landowner does not own superadjacent airspace which he has not subjected to possession by the erection of structures or other occupancy.").

more conventional entry upon it."⁸⁶ When flights invade the airspace that the landowner can "use in connection with the land," the Court said, a taking can occur.⁸⁷

In rejecting the second argument, the Court held that landowners do own surface airspace above their land: "The landowner owns at least as much of the space above the ground as he *can occupy or use* in connection with the land." Finally, the Court acknowledged and cited favorably North Carolina's claim to sovereignty to surface airspace in its takings analysis. ⁸⁹ The Supreme Court reiterated in *Causby* that "while the meaning of 'property' as used in the Fifth Amendment was a federal question, 'it will normally obtain its content by reference to local law." ⁹⁰

Post-Causby Effects and the Two Zones of Airspace

In the wake of the *Causby* decision, a commentator noted that the Court had formalized the traditional view (described by Frederic Lee in drafting the 1926 Act, for instance⁹¹) that airspace

Lee, supra note 72, at 108.

⁸⁶ *Id.* at 264.

⁸⁷ Id. at 264.

⁸⁸ *Id.* at 264 (emphasis added).

⁸⁹ *Id.* at 266 ("Sovereignty in the airspace rests in the State 'except where granted to and assumed by the United States.' Gen.Stats.1943, § 63-11.").

⁹⁰ *Id.* at 266 (quoting United States ex rel. TVA v. Powelson, 319 U.S. 266, 279 (1943)). *See also* Stop the Beach Renourishment, Inc. v. Florida. Dep't. of Envtl. Prot., 130 S. Ct. 2592, 2612 (2010) ("The Takings Clause only protects property rights as they are established under state law, not as they might have been established or ought to have been established."). Further: "*Generally speaking, state law defines property interests*, including property rights in navigable waters and the lands underneath them." Stop the Beach Renourishment, Inc., 130 S. Ct. at 2597 (internal citation omitted; emphasis added); Board of Regents of State Colleges v. Roth, 408 U.S. 564, 577 (1972).

⁹¹ Lee noted:

Two types of air domain are required to be distinguished, the higher strata of air space and the surface air space.... Such surface air space has always been regarded as appurtenant to the contiguous lands and waters and a part of the domain of the nation holding such lands and waters. Such surface air space is acquired as a part of the domain of a nation by the same method and at the same time as the subjacent land and waters are acquired. The acquisition, as a part of a nation's domain, of the higher strata of air space is dependent however, on other considerations [namely, international law].

can be divided into two zones:92

In the lower zone next to the earth's surface, private property in the airspace is permitted and we must assume that in that zone normal relationships exist between State and Federal sovereignty as elsewhere in State territory. But in the upper zone . . . the rights of the Federal Government seem to have been considered so paramount that Congress was able to place the navigable airspace, as stated in the Court's opinion, "within the public domain."

The *Causby* case brought predictability to potential litigants in airport cases. ⁹³ After *Causby*, Congress amended "navigable airspace" to mean takeoff and landing glide paths. Aviation officials believed this amendment negated takings lawsuits for planes staying in their authorized glide paths, but the Supreme Court held in *Griggs v. Allegheny County* that even planes in navigable airspace are invading property at low altitudes. ⁹⁴ As the Supreme Court said in *Griggs*, *Causby* stands for the proposition that government takings of air easements must be compensated, navigable airspace or not. ⁹⁵ The Court in *Griggs* noted that "the use of land presupposes the use of some of the airspace above it." ⁹⁶ In short, *Causby* and *Griggs* hold that navigable airspace designations must yield to property rights at low altitudes.

Therefore, the common practice evolved for airports to negotiate and compensate landowners for nuisance and avigation easements.⁹⁷ Today, airports prefer to acquire all the land

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⁹² John C. Cooper, *State Sovereignty vs. Federal Sovereignty of Navigable Airspace*, 15 J. AIR L. & COM. 27, 27 (1948). *See also* Madeline C. Dinu, *State Sovereignty in the Navigable Airspace*, 17 J. AIR L. & COM. 43, 51 (1950) ("So far as the private property owner is concerned, the superadjacent non-navigable airspace below safe altitudes of flight . . . has the quality of property, and as an incident to his ownership of the land, the landowner has a claim to such non-navigable airspace. Invasions of it are like trespass on the surface, and the rights of the private property—owner are paramount in such non-navigable airspace.").

⁹³ BANNER, *supra* note 64, at 260.

⁹⁴ Griggs v. Allegheny Cty., 369 U.S. 84, 88–89 (1962).

⁹⁵ *Id.* at 88.

⁹⁶ Id. at 89.

⁹⁷ See, e.g., Phoenix Sky Harbor International Airport, *Appendix F: Noise and Avigation Easements* (F.A.R. Report, Noise Compatibility Study Update,1999), https://www.skyharbor.com/docs/default-source/pdfs/Part-150/appendices/1999_part150_appendixf_noiseandavigationeasements.pdf?sfvrsn=2 (several examples of the legal templates for easements negotiated between airports and nearby property owners).

(including the airspace) needed for landing and departing aircraft, but, as FAA guidance notes, acquisition of the needed land is not always possible. 98 In those cases, the FAA requires airports receiving federal support to purchase an avigation easement from neighboring property owners.⁹⁹ As discussed later in this paper, there is a presumption by courts that the two zones of airspace are separated at 500 feet above ground level, though property interests can extend higher.

Application to Drone Airspace Regulation and Liability

As part of the 2018 FAA Reauthorization Act, Congress and the president required the FAA to integrate small drones into the national airspace system. 100 An extensive commercial drone industry will need drone highways—aerial corridors—crisscrossing towns, suburbs, and cities. Currently, some small drone corridor pilot programs exist around the country. However, if the FAA were to extend those drone corridors unilaterally, the corridors would face opposition not only from landowners but also from state governments, who have a plausible claim of sovereignty and police powers over surface airspace. 101

The Court in Causby and Griggs made three legal principles clear that are relevant for drone operations:

a) Landowners own surface airspace—the immediate reaches above the land including the airspace unoccupied by buildings.

⁹⁸ Federal Aviation Administration, Land Acquisition and Relocation Assistance for Airport Improvement Program (AIP) Assisted Projects 4 (U.S. Department of Transportation, Advisory Circular No. 150/5100-17, Nov. 7, 2005. https://www.faa.gov/documentLibrary/media/advisory_circular/150-5100-17/150_5100_17_chg6.pdf.

⁹⁹ An FAA advisory circular notes: "Normally the [airport] sponsor will acquire fee title to all land within the airport boundaries and for the runway protection zone (RPZ). If fee acquisition for the RPZ is not practical then an avigation easement is required." Id. at 4.

¹⁰⁰ 49 U.S.C. § 44802 (2020).

¹⁰¹ THE FEDERALIST No. 45 (James Madison) ("The powers reserved to the several States will extend to all the objects, which, in the ordinary course of affairs, concern the lives, liberties, and properties of the people, and the internal order, improvement, and prosperity of the state.").

- b) Low-altitude flights, even if within navigable airspace, can amount to a taking.
- c) The Causby Court acknowledged and cited favorably state claims of sovereignty to airspace and looked to state law for the definition of airspace property.

Federal and state policymakers should consider formalizing a framework of cooperative federalism to quickly integrate drones into US airspace while avoiding controversy and litigation between the federal and state governments. ¹⁰² This idea for cooperative federalism for drone regulation has been described elsewhere, ¹⁰³ given the legal and practical realities of drone operations (for example, only three FAA employees enforce drone regulations in Ohio, a state of nearly 12 million residents). ¹⁰⁴ In this framework, the FAA would largely be responsible for certifying drone aircraft and UTM systems (for example, separation minimums between drones and emergency landing procedures) and "whitelisting" surface airspace where drone operations could commence. States and cities would then have responsibility for demarcating drone highways, leasing airspace if needed, and creating other traditional time, place, and manner restrictions.

Perhaps the closest cooperative federalism model and analog is telecommunications—another technology with widespread enterprise and consumer use. The construction and operation of droneports and drone highways, like telecommunications, will require local zoning permits and private property. In telecommunications, the Federal Communications Commission (FCC) has sole authority over communications devices and interstate communications. However, the FCC does not pick and choose where telecommunications facilities are installed. The

¹⁰² Michael S. Greve, *Bloc Party Federalism*, 42 HARV. J. L. & PUB. POL'Y 279, 287 (2019) (noting that cooperative federalism "works where and when states are tolerably homogenous" and "breaks down when a substantial number of states, *acting as a bloc*, refuse cooperation") (emphasis in original).

¹⁰³ Jonathan M. Zalewski, Sharing the Sky: Regulating Unmanned Aircraft in American Airspace Via Cooperative Federalism, 42 U. DAYTONA L. REV. 333 (2017).

¹⁰⁴ *Id.* at 351.

construction of cell sites and conduit is governed by state and local police powers, though Congress authorizes the FCC to preempt state or local rules that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." Another similarity drones have with telecommunications is the possible use of public rights-of-way, a proposal discussed later in this paper. That proposal for airspace leasing of the public rights-of-way to drone operators contemplates revenue sharing between federal and state governments, another element where federal and state interests coincide.

Above all, by demarcating low-altitude drone corridors above public rights-of-way, federal and state aviation officials and drone operators can avoid takings and other lawsuits from residents and property owners. Landowners suffer not only from nuisance and trespass from regular drone flights, but also from potential loss of their air rights. ¹⁰⁶ Local droneport and UTM system operators, whether public or private, face the prospect of expensive litigation and landowner remedies if they fly into surface airspace above private property. ¹⁰⁷ Private droneport

¹⁰⁵ 47 U.S.C. § 253 (a).

¹⁰⁶ With drone overflights, landowners face not only nuisance and trespass but also, over years, drone operators' possible acquisition of a prescriptive easement to landowners' airspace, which would entitle drone operators to enter property to cut trees or prevent new construction on the land. Several states that have considered aviation lawsuits have recognized prescriptive easements—essentially adverse possession of airspace. Courts in California, Connecticut, Oregon, and Washington recognize prescriptive easements of airspace. Baker v. Burbank-Glendale-Pasadena Airport Auth., 220 Cal. App. 3d 1602, 1609 (1990); Insitoris v. City of Los Angeles, 210 Cal. App. 3d 10, 14 (1989); Ventres v. Godspeed Airport LLC, 881 A.2d 937, 949 (Conn. 2005) (holding that airports can acquire prescriptive easement, including the right to enter neighboring land and cut trees); Christie v. Miller, 719 P.2d 68, 70 (Or. Ct. App. 1986); Petersen v. Port of Seattle, 618 P.2d 67, 70 (Wash. 1980) (acknowledging that avigation easements for public use can be prescriptively acquired and are not compensable). Although not expressly acknowledging a prescriptive easement, a New York court similarly prevented development in an aviation case:

Although the operations of the airport have expanded considerably since 1962, the claimant purchased the property with knowledge of the presence of an airport, and therefore assumed the risk of fluctuations in market value that might be caused by the existence of a nearby airport. In this case, it cannot be said that the claimant ever had a reasonable expectation that the building could be vertically expanded. As the operations of the airport increased, the possibility of expansion diminished. This was not a result of the taking but of the risk the property owner assumed upon purchase of the property.

³⁷⁷⁵ Genesee St., Inc. v. State, 415 N.Y.S.2d 575, 585 (1979).

¹⁰⁷ It is established law that noise and takings issues fall on the airport—the FAA has generally been absolved of responsibility. "It is now firmly established that the airport proprietor is responsible for the consequences which

and UTM system operators are particularly vulnerable, much like private airports face more costly lawsuits than public airports.¹⁰⁸

Unlike airport operators, droneport operators face potential lawsuits from virtually any resident subject to overflights because most drones are near the surface during the entire flight, not simply on takeoff and landing. As the Merideth case and more than a dozen drone shootings reveal, many Americans have great skepticism about drone flights.¹⁰⁹

Proposal for Airspace Leasing Above Federal and State Roadways

The FAA has acknowledged local authorities' "police power" in five areas: land use, zoning, privacy, trespass, and law enforcement operations. The jurisdictional problem arises because airspace *is land*—subject to state police powers—and *is navigable airspace*—subject to federal regulation. As mentioned earlier, many states have claimed sovereignty to low-altitude airspace and more than 20 states expressly allow state and municipal officials to lease airspace above public land or public easements. 111

attend his operation of a public airport." Air Transport Ass'n of America v. Crotti, 389 F. Supp 58, 63 (N.D. Cal. 1975) (citing City of Burbank v. Lockheed Air Terminal, 411 U.S. 624, 635 n.14 (1973)). See Ricarda L. Bennett, Airport Noise Litigation: Case Law Review, 47 J. AIR L. & COM. 449, 489 (1982). Much more than federal courts, which tend to limit inverse condemnation to overhead flights, state courts interpret state constitutions' conception of inverse condemnation to include aircraft noise over adjacent properties. Bennett, supra at 490. See, e.g., Greater Westchester Homeowners Ass'n v. City of Los Angeles, 26 Cal. 3d 86 (1979), cert. denied, 449 U.S. 820 (1980). In some states, if a landowner wins an inverse condemnation lawsuit against the state, the state is responsible for reasonable fees, including attorney's fees. See, e.g., CAL. CIV. PROC. CODE § 1036; VA. CODE ANN. § 25.1-420.

¹⁰⁸ No court, for instance, has enjoined a publicly operated airport (though damages for nuisance have been awarded). In contrast, privately owned airports face court injunctions. J. Scott Hamilton, *Allocation of Airspace as a Scarce Natural Resource*, 22 TRANSP. L.J. 251, 262 (1994). Court penalties also seem to be stiffer, including daily damages for continuing operations. *Id*.

¹⁰⁹ Brent Skorup & Connor Haaland, *Encounters of the Drone Kind: Drone Shootings and No-Fly Zones*, TECHNOLOGY LIBERATION FRONT, June 26, 2020, https://techliberation.com/2020/06/26/encounters-of-the-drone-kind-drone-shootings-and-no-fly-zones/ (documenting cases of drone shootings in the United States).

¹¹⁰ Operation and Certification of Small Linguished Aircraft Systems, 81 Fed. Reg. 42, 064, 42, 194 (June 28, 2016).

¹¹⁰ Operation and Certification of Small Unmanned Aircraft Systems, 81 Fed. Reg. 42,064, 42,194 (June 28, 2016) (codified at 14 C.F.R. pts. 21, 43, 61, 91, 101, 107, et al.).

¹¹¹ See Brent Skorup & Connor Haaland, "Which States Are Prepared for the Drone Industry? A 50-State Report Card" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, March 2020), https://www.mercatus.org/publications/technology-and-innovation/which-states-are-prepared-drone-industry.

Cooperative Federalism for Airspace Leasing

To avoid lawsuits from private property owners for takings and trespass and to avoid federal preemption litigation, the USDOT and state DOTs should expand their existing airspace leasing collaboration and revenue sharing for establishment of drone highways. Responsibility for demarcating aerial corridors would be shared by USDOT and state DOTs given the mix of aviation safety, state police powers, and property rights issues. States would generally receive leasing revenues from airspace use over state highways and local roads, and the US Department of Transportation would receive leasing revenues from airspace use over interstate highways.

Airspace leasing is not new. There was, for instance, a short period of market disposition—open bidding—on air routes in the 1920s, until Congress and federal regulators stepped in suddenly to assign airspace, routes, and terminals via administrative processes. More relevantly for small drones, the practice of roadway airspace leasing was formalized in a 1961 amendment to federal highway laws allowing states and cities "to use or permit the use of the airspace above and below . . . the highway pavement for such purposes as will not impair the full use and safety of the highway." In the 1970s and 1980s, state DOTs began leasing airspace in earnest as many states' financial status degraded. Beginning in 1986, the Federal Highway Administration of the US Department of Transportation created a policy that revenue from roadway airspace leasing must be dedicated to highway programs, not general revenue funds. Having put this policy into place, the Federal Highway Administration began encouraging

¹¹² See Brent Skorup, Who Should Govern the Skies?, in EYES TO THE SKY (Matthew Feeney ed., forthcoming); Gareth R. Jones & Michael W. Pustay, Interorganizational Coordination in the Airline Industry, 1925–1938: A Transaction Cost Approach, 14 J. MGMT. 529, 537 (1988).

¹¹³ Federal-Aid Highway Program of 1961 § 104, 23 U.S.C. § 111 (2020).

¹¹⁴ Roop & Mathur, *supra* note 69, at 2.

¹¹⁵ See id. at 2.

airspace leasing and offered technical assistance to state DOTs to routinize the practice. ¹¹⁶ To date, this authority has not been employed for drone highway use.

Drone Highways Above Roadways

The idea for leasing airspace above highways or utility and railroad rights-of-way to drone operators has circulated for a few years. ¹¹⁷ In fall 2017, I was invited to brief a working group of the FAA's Drone Advisory Committee about drone airspace leasing. The idea was discussed in the Drone Advisory Committee's 2018 report, a 2019 report from the GAO, and a 2020 report from the GAO. ¹¹⁸ The earliest mention in the media to my knowledge is a June 2017 *Salt Lake Tribune* story, noting that a Utah lawmaker proposed airspace leasing above public roads. ¹¹⁹ The idea may have developed from railroad or utility use of drones. BNSF Railway, for instance, flew

¹¹⁶ *Id.* at 2.

¹¹⁷ In Japan, for instance, the regulator envisions drone highways that use the airspace owned by public utilities. *See TEPCO Group, Zenrin and Rakuten Examining "Drone Highways" for Drone Logistics*, AIR CARGO NEWS, July 16, 2018, https://www.ajot.com/news/tepco-group-zenrin-and-rakuten-examining-drone-highways-for-drone-logistics; *Tepco Ventures, Success in Package Delivery Experiment Using Drone Highway through Mountains*, TEPCO VENTURES, INC., Jan. 28, 2019, https://www.tepcoventures.co.jp/en_news/success-in-package-delivery-experiment-using-drone-highway-through-mountains-tepco-ventures-rakuten-zenrin-and-chichibu-city-jointly-conducted-beyond-visual-line-of-sight-drone-flight-test/. In the interest of brevity, this paper does not analyze the issue of leasing utility or railroad rights-of-way airspace. Such leases would likely resemble the private sale and leasing of airspace.

Technical Commission for Aeronautics, RTCA Paper No. 047-18/DAC-011, Mar. 2018), https://www.faa.gov/uas/programs_partnerships/drone_advisory_committee/rtca_dac/media/dac_tg3_funding_report_long_term_final.pdf (discussing the "Auction or Lease of Airspace"); US Government Accountability Office, *Unmanned Aircraft Systems: FAA Should Improve Drone-Related Cost Information and Consider Options to *Recover Costs* 38 (Report GAO-20-136, December 2019), https://www.gao.gov/assets/710/703320.pdf; U.S. Government Accountability Office, *Unmanned Aircraft Systems: Current Jurisdictional, Property, and Privacy Legal Issues Regarding the Commercial and Recreational Use of Drones, Appendices I–VI 35 (Report B-330570, September 2020), https://www.gao.gov/assets/710/709371.pdf)("[T]wo legal commentators have recently proposed that states could create 'drone highways' above public rights-of-way that UAS operators could use for parcel delivery and other services"). *See also* Brent Skorup, *Auctioning Airspace*, 21 N.C. J.L. & Tech. 79 (2019) (proposing the demarcation and auction of aerial corridors for passenger drones).

¹¹⁹ Lee Davidson, Request for Transportation and Transit Reform Ideas Bring Flood of Proposals—Including State Takeover of UTA, SALT LAKE TRIBUNE, June 14, 2017, https://archive.sltrib.com/article.php?id=5403664&itype=CMSID (citing Sophia DiCaro). See also Brent Skorup & Melody Calkins, Why Not Auction Off Low-Altitude Airspace for Exclusive Use?, TECHNOLOGY LIBERATION FRONT, June 27, 2017, https://techliberation.com/2017/06/27/why-not-auction-off-low-altitude-airspace-for-exclusive-use/.

hundreds of hours of long-distance drone flights from 2014 to 2018 under the FAA's Pathfinder Program using the railroad's airspace within the railroad right-of-way, ¹²⁰ and the market in airspace use above railroad rights-of-way has been active for over a century. ¹²¹

There are several benefits to federal and state authorities demarcating safe drone routes above roadways. First, using public right-of-way airspace negates most trespass, takings, and nuisance lawsuits from landowners because the airspace is already acquired and dedicated for (somewhat noisy) transportation uses. Second, demarcating airspace for drone highways opens up vast potential for new competitors and services. Drone operators can deploy services quickly once they obtain access to airspace. In April 2020, the United Parcel Service and drone operator DroneUp revealed how quickly services can be deployed once they have airspace access: 122

'DroneUp and UPS did the most extensive delivery of packages that has ever been done,' says Tom Walker, DroneUp CEO. 'Hundreds, if not thousands of flights—it was an exhaustive exercise. We took a [vacant] 55-acre college campus, we made it a town, and by the end of day two we were doing deliveries every 3 minutes.'

Roadways and their accompanying airspace represent a huge amount of unused, non-

revenue-generating public real estate. "Most major cities' road systems take up 25%–35% of the city's land area," and, according to estimates using Federal Highway Administration data, "the amount of existing [right-of-way] that is a part of the National Highway System (NHS) is

¹²⁰ "BNSF's work with the FAA demonstrated our ability to control the land and airspace utilized by our UAS flights across managed flight corridors over BNSF's property." *Keeping Pace with Innovation—Update on the Safe Integration of Unmanned Aircraft Systems into the Airspace: Hearing Before the Subcomm. on Aviation Operations, Safety, and Security of the Committee on Commerce, Science and Transportation,* 115th Cong. 18, 20 (May 8, 2018) (prepared statement of Todd Graetz, BNSF Railway), https://fas.org/irp/congress/2018 hr/uas-integration.pdf.

¹²¹ Committee on New Developments in Real Estate Practice, *Recent Developments in Airspace Utilization*, 5 REAL PROP. PROB. & Tr. J. 347, 350–52 (1970).

¹²² Miriam McNabb, *UPS Drone Delivery: DroneUp Flies to Prove the Case for Coronavirus Response*, DRONELIFE, April 21, 2020, https://dronelife.com/2020/04/21/ups-drone-delivery-droneup-partners-fly-to-prove-the-case-for-coronavirus-response/.

¹²³ In suburban areas "the percentage is smaller, around 15%–20%." Leo Thompson, *Is Your City Infrastructurally Obese?*, STRONG TOWNS, Oct. 29, 2019, https://www.strongtowns.org/journal/2019/10/29/is-your-city-infrastructurally-obese?rq=leo.

between 3,000–6,000 square miles," which is about the size of Connecticut. ¹²⁴ Because there are "more than 8 million lane miles of public roadways under state DOT supervision," ¹²⁵ an extensive nationwide air corridor network exists for drone operators to use.

Third, roadway airspace leasing ensures that this natural resource is allocated by the market, not via regulatory rationing or first-come-first-serve mechanisms. 126 Markets are used for the disposition of public assets such as offshore oil leases and public timber lands, 127 and there is legal precedent for airspace leasing. Under federal law, state DOTs must charge fair market value for airspace leases—no giveaways—of aerial real estate above roadways purchased with assistance from the federal Highway Trust Fund. 128 It's difficult to define ex ante the best terms of a lease that encourages long-term investments into drone infrastructure while not creating local or regional monopolies. However, a good analog is spectrum licenses—10-year licenses with the presumption of renewal—which encourage billions of dollars of annual infrastructure investment. Competition in drone services can be accomplished by a "layer cake" approach to

¹²⁴ US Department of Transportation, Federal Highway Administration, Office of Transportation Policy Studies, *Future Uses of Highway Rights of Way*, Report Summary (April 2012), https://www.fhwa.dot.gov/policy/otps/rowstudyproj.cfm.

¹²⁵ Carson Poe & Gina Filosa, *Alternative Uses of Highway Rights-of-Way: Accommodating Renewable Energy Technologies* 23, Transportation Research Record: Journal of the Transportation Research Board, No. 2270, 23, 2012.

¹²⁶ See Skorup, supra note 118.

¹²⁷ *Id*.

¹²⁸ Under federal law, "a State shall charge, at a minimum, fair market value for the sale, use, lease, or lease renewal . . . of real property acquired with Federal assistance made available from the Highway Trust Fund." 23 U.S.C. § 156(a). This applies to right-of-way airspace: "The predecessor to § 156 of title 23, U.S.C., applied only to the sale, use, lease or lease renewals of 'right-of-way airspace'. . . . [The Federal Highway Administration] correctly interprets the TEA-21 amendment as expanding the scope of § 156 to allow reapplication of the proceeds from all real property dispositions." US Government Accounting Office, *Subject: Use of Proceeds from the Sale of Real Property Purchased with Federal Highway Funds* 2 (B-290744, Letter from Anthony H. Gamboa, General Counsel, to Sen. John McCain, Committee on Commerce, Science and Transportation, September 13, 2002), https://www.gao.gov/assets/370/366636.pdf.

leasing (perhaps three drone highways above each roadway at three separate altitudes) and the encouragement of secondary markets in airspace leases.

A final, related benefit is that the government receives newfound revenue for the disposition of drone corridors. Under current law, the federal government retains a pro rata share of airspace leasing revenues for road projects receiving federal funding.¹²⁹ Federal approval is needed for airspace leasing above those roads, but states have and should have a relatively free hand in leasing airspace above state and local roads to drone operators.¹³⁰

Airspace leasing above the public rights-of-way isn't straightforward in every state. In some jurisdictions, there is extensive practice with airspace leasing, whereas in others it is difficult under current state law. The nature of the title or right the state or municipality (or utility or railroad) holds to surface airspace above a road or tracks depends on the jurisdiction. ¹³¹ Illinois law is quite restrictive, for example, and municipalities can lease airspace to only the owners of the fee. ¹³² Virginia law is more liberal and allows municipalities to lease or sell airspace above roads and rights-of-way that the municipality owns in fee simple. ¹³³ However, Oregon has perhaps the broadest airspace leasing law, allowing leasing of airspace whether the state or

¹²⁹ US Government Accounting Office, *supra* note 128, at 6 ("[I]n 1987, Congress asserted an interest in the federal share of the proceeds resulting from the disposition of air rights.").

¹³⁰ US Department of Transportation, *Airspace Guidelines to 23 CFR 710.405*–710.407, FEDERAL HIGHWAY ADMINISTRATION, revised Aug. 10, 2010, https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/airspace_guidelines.cfm_("FHWA approval [for air rights leases above roads] is normally required only for airspace leases on the Interstate system."). Right-of-way use agreements for airspace above interstate roads must meet federal requirements. *See* 23 C.F.R. § 710.405.

¹³¹ See, e.g., Kiely v. Graves, 271 P.3d 226 (Wash. 2012) (internal citations omitted): "The title or right acquired by the public in a statutory dedication depends upon the language of a jurisdiction's dedication statute. In many jurisdictions, a statutory dedication conveys a fee interest to the public. However, in other jurisdictions a statutory dedication may confer no further right than a mere easement." *Id.* at 230.

¹³² 65 Ill. Comp. Stat. § 5/11-75-1.

¹³³ Va. Code § 15.2-2030.

municipality possesses fee title or an easement.¹³⁴ Some states, like California, have well-established airspace leasing offices, ¹³⁵ whereas others have little experience in airspace leasing.

One objection—safety of pedestrians and road users—is imminent and worth responding to briefly. Drones flying overhead will crowd urban skies somewhat, and collisions with other drones or foreign objects (such as birds, wires, and construction cranes) are possible. To date, the FAA is ensuring safety with drone certifications and inspections of operations, which will mitigate much of the risk. Nevertheless, the flight over roadways does inject some risk to pedestrians and roadways users. As with any new service or product, risk will be mitigated by some combination of government certification, professionalization of operators, and new insurance products. Some insurers are already creating new or expanding traditional aviation products to cover drones and drone debris. The risk of over-roadway drone operations is not negligible, but a professionally operated drone abiding by FAA policies likely poses less risk to life and property than other routine roadway uses.

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¹³⁴ The law provides: Any political subdivision holding the easement or fee title to a street or highway may lease the space above or below that street or highway for private purposes" OR. REV. STAT. § 271.430.

¹³⁵ Caltrans, *Airspace and Telecommunications Licensing*, https://dot.ca.gov/programs/right-of-way/airspace-and-telecommunications-licensing.

¹³⁶ See, e.g., Insurance Canada, *Handing Over Control to Autonomous Vehicles*, April 25, 2014, https://www.insurance-canada.ca/2014/04/25/handing-over-control-to-autonomous-vehicles/ ("Lloyd's underwriters, including Kiln, are already insuring UAS, and are lending their expertise to regulatory discussions in the European Union aimed at gradually accommodating the new technology").

Proposal for a Presumption of Trespass for Drone Flights Below 200 Feet

The final issue is determining the height at which drone operators can fly with some certitude that they will not face liability from private landowners. As other legal commentators have noted, the ambiguity surrounding drone trespass invites complex litigation between drone operators and landowners.¹³⁷ Traditional aviation law and the judicial precedents provide a possible model. As Migala points out, courts apply a limit of 500 feet in an almost mechanical fashion, finding a compensable taking for even transitory flights below 500 feet.¹³⁸ This 500-foot rule is treated much like a presumption by courts:¹³⁹ the *floor* for a taking, not the *ceiling*. As one federal court stated in an aerial takings case:¹⁴⁰

[T]he most appropriate rule is that when overflights occur in navigable airspace, a presumption of non-taking exists[,] which can be overcome by proof of destruction of, or substantial impairment to the property.

This judge-made rule is likely derived from FAA regulations, which, with some exceptions for glide paths and helicopters, ¹⁴¹ deem airspace below 500 feet as non-navigable airspace. ¹⁴²

ROCK L. REV. 245, 255 (2017); Lane Page, Note, Drone Trespass and the Line Separating the National Airspace and

Private Property, 86 GEO. WASH. L. REV. 1152, 1173 (2018).

¹³⁷ See, e.g., Lindsey P. Gustafson, Arkansas Airspace Ownership and the Challenge of Drones, 39 U. ARK. LITTLE

¹³⁸ See, e.g., Griggs v. Allegheny Cty., 369 U.S. 84, 90 (1962); Palisades Citizens Ass'n, Inc. v. C. A. B., 420 F.2d 188, 192 (D.C. Cir. 1969); United States v. 15,909 Acres, 176 F. Supp. 447, 448 (S.D. Cal. 1958); Speir v. United States, 485 F.2d 643, 646–47 (Ct. Cl. 1973); Aaron v. United States, 311 F.2d 798, 801 (Ct. Cl. 1963); A. J. Hodges Indus., Inc. v. United States, 355 F.2d 592, 597 (Ct. Cl. 1966); Jensen v. United States, 305 F.2d 444, 446 (Ct. Cl. 1962); Dick v. United States, 169 F. Supp. 491, 494 (Ct. Cl. 1959); Highland Park, Inc. v. United States, 161 F. Supp. 597, 598 (Ct. Cl. 1958); Persyn v. United States, 34 Fed. Cl. 187, 195–96 (1995), aff'd, 106 F.3d 424 (Fed. Cir. 1996); Hsu v. Cty. of Clark, 173 P.3d 724, 731–32 (Nev. 2007); Thompson v. City & Cty. of Denver, 958 P.2d 525, 527 (Colo. App. 1998); Brown v. United States, 73 F.3d 1100, 1101 (Fed. Cir. 1996).

¹³⁹ See, e.g., Branning v. United States, 654 F.2d 88, 102–03 (Fed. Cir. 1981).

¹⁴⁰ Stephens v. United States, 11 Cl. Ct. 352, 362 (1986).

¹⁴¹ See 14 CFR § 91.119(d) (permitting helicopter and powered parachute operations below the usual minimum safe altitude requirements).

¹⁴² See 14 CFR 91.119.

This rule derives from the Supreme Court's holdings in *Causby* and *Griggs* that landowners "must have exclusive control of the immediate reaches of the enveloping atmosphere." That 500-foot rule provides useful certainty in traditional aviation about liability and property rights. and some proposals recommend drawing an invisible, fixed line in the sky to separate private property from navigable airspace and drone routes. Some scholars would draw the line at 200 feet, some at 350 feet, and some at 500 feet (resembling traditional aviation's legal standards). There is a bill in the U.S. House and one in the U.S. Senate that would draw that line, largely delegating airspace management below 200 feet to the states and private property owners. As

In the absence of congressional or FAA action on this issue, courts should step in to establish a presumption of trespass for drone flights below a certain altitude. The 200-foot line used in those proposed bills is a useful benchmark for courts.

The starting point is *Causby*, which holds that "invasions of [superadjacent airspace] are in the same category as invasions of the surface."¹⁴⁹ Clearly, the FAA cannot simply start designating drone corridors below the rooflines and treetops in backyards and private lands, absent compensation to the landowner. However, *Causby* and subsequent cases inject a nuisance

¹⁴³ United States v. Causby, 328 US 256, 264 (1946).

¹⁴⁴ Gustafson, *supra* note 137, at 264–66.

¹⁴⁵ Page, *supra* note 137, at 1173.

¹⁴⁶ Gregory McNeal, *Drones and Aerial Surveillance: Considerations for Legislatures*, Center for Technology Innovation at Brookings Institution, November 2014, https://www.brookings.edu/research/drones-and-aerial-surveillance-considerations-for-legislatures/.

¹⁴⁷ See Troy A. Rule, Airspace in an Age of Drones, 95 B.U. L. REV. 155 (2015).

¹⁴⁸ Drone Innovation Act of 2017, H.R. 2930, 115th Cong. (2017), https://www.congress.gov/bill/115th-congress/house-bill/2930/text.

¹⁴⁹ United States v. Causby, 328 US 256, 265 (1946).

standard into takings jurisprudence:¹⁵⁰ an aerial invasion is a taking, the *Causby* Court says, when it creates "a direct and immediate interference with the enjoyment and use of the land."¹⁵¹

Courts should consider flights below 200 feet presumptively as a trespass and a nuisance. Above that height, most small drones are fairly quiet. More evidence is needed, but pilot programs in the United States suggest that drones flying above 200 feet altitude would not substantially interfere with the use and enjoyment of the underlying land. 152

Further, safety concerns of manned aircraft and the FAA are attenuated below 200 feet altitude. Most airspace below 500 feet is non-navigable airspace, so very few manned aircraft fly in surface airspace. The attenuation of the federal interest is indicated by relative indifference to aerial obstructions below 200 feet. Current regulations require developers and construction companies to provide notice to the FAA of new construction or towers within approximately 3.5 miles of an airport. This notice is not required, however, for towers and obstructions that are less than 200 feet tall, 154 presumably because such obstructions pose a negligible risk to air

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¹⁵⁰ Compare with a legal definition of a private nuisance: "when the plaintiff's use and enjoyment of her land is interfered with substantially and unreasonably through a thing or activity." Legal Information Institute, Wex Law Dictionary, https://www.law.cornell.edu/wex/nuisance. This blending of nuisance and trespass in aerial invasion cases has old precedents. *See e.g.*, Clifton v. Bury [1887] 4 TLR 8 (UK) (finding that shots fired across land at a trajectory of 75 feet did not constitute a technical trespass but was nevertheless actionable when dangerous to the use and enjoyment of the land).

¹⁵¹ United States v. Causby, 328 US 256, 266 (1946).

¹⁵² Google Wing flights in Virginia cruise between 100 feet and 200 feet above the ground. *See* Shayne Dwyer, *Christiansburg Meets Wing, the Self-Flying Delivery Drones Soon To Be in Its Sky*, 10 NEWs, September 28, 2019, https://www.wsls.com/2019/09/28/christiansburg-meets-wing-the-self-flying-delivery-drones-soon-to-be-in-its-sky/; Jacob Demmitt, *Droning On: Some Warn of Rift to Come When Aerial Delivery Arrives in Blacksburg and Christiansburg*, Roanoke News, May 25, 2019, https://roanoke.com/news/droning-on-some-warn-of-rift-to-come-when-aerial-delivery-arrives-in-blacksburg-and/article_63c29dec-5c70-551c-bdc2-a549e4b3f8c9.html ("The mayors of the towns where Google Wing flights are operating have not heard major resident complaints about drone noise.").

¹⁵³ 14 C.F.R. §§ 77.9, 77.17(a).

¹⁵⁴ Id.

traffic.¹⁵⁵ A presumption of trespass at 200 feet would recognize two realities: property rights and police powers are stronger at the surface, and federal interests and aviation safety are more salient above 200 feet.

Conclusion

Drone technology has rapidly matured in recent years. Firms and state governments are prepared today to deploy statewide UTM systems and extensive long-distance drone services. Until federal and state aviation officials define their respective regulatory responsibilities, however, the industry will be delayed by litigation and fear of stranded investment. The federal dominance in traditional aviation, under current understandings of property and takings law, is not feasible in a world of drones flying in low-altitude surface airspace. Federal and state policymakers should anticipate the gridlock and legal controversies and recognize state, city, and landowner interests in airspace. Further, through demarcation and leasing of airspace above roadways, the industry and public authorities can begin, almost immediately, widespread long-distance drone services.

¹⁵⁵ That said, section 2110 of the FAA Extension, Safety and Security Act of 2016, Pub. L. No. 114-190, 199, 130 Stat. 615, 623–25 (2016), requires improved physical markings or lighting for some rural towers that are 50–200 feet tall. *See New FAA Rules Will Require Some 50-to-200-Foot Towers To Be Marked*, WIRELESS ESTIMATOR, July 25, 2016, http://wirelessestimator.com/articles/2016/new-faa-rules-will-require-some-50-to-200-foot-towers-to-be-marked/.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Elliott Reed

elliottjohnreed@gmail.com

Public comment:

Please, no drones near or in Smith Rock State Park. I have seen drones swoop towards bald eagles. They are distracting and really take away from the experience.

With Smith being more popular than ever I think this is a necessary step. The only drones I think should be allowed are for search and rescue missions.

Thank you, Elliott Reed



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Micki Forrester

micki-5@hotmail.com

Public comment:

I personally would like to see drones prohibited from most if not all Oregon State Parks. I enjoy the park system for it's peace and tranquility. If allowed and everyone realizes it there would potentially be hordes of drones whizzing and "droning" on (no pun intended) assaulting ears. I also have little faith in a large portion of people to not harass the wildlife - either intentionally or unintentionally simply trying to get a good picture.

Thanks for considering my opinion.

Micki Forrester



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert and Gretchen Pederson

pondhawk2@gmail.com

Public comment:

We are opposed to having any drone use at all in Oregon State Parks, because we think the use of such devices is not compatible with the primary functions of these special lands.

These state treasures were set aside for protection by virtue of features that make Oregon such a spectacular part of the world. Some parks have stunning scenery, others celebrate heritage and stories of the past.

According to the OPRD website, "Oregon's state parks are among the most popular In the United States: their combined day-use and camping attendance of 54,421,472 visitors (2017-2018) consistently ranks the system among the 10 most visited in the nation" and, "Each of our Oregon state parks is an individual place where people play, picnic, camp, rest, hike, renew, and everything in between. They are an everyday reminder of the things that make Oregon great, and their very existence is a testament to what we collectively value."

With already high rates of visitation, do we need to add a disruptive activity that could bring in more people? Recreation is an important function of state parks, but not at the expense of the experience of visitors who come to embrace nature and get away from the noise and disturbances of city life. Hiking, canoeing, and picnicking are fun and quiet activities. Drones are noisy and visually disturbing. They invade the peaceful ambiance of a park. We also find that they violate our privacy by flying close by and often taking photographs. Some argue that new models are much quieter than old ones. That maybe so, but even if they were completely silent, we would find them visually offensive.

Drones are also a nuisance to wildlife. We were once on the coast near a gull colony with a drone operator who wanted video footage. She launched the drone, and immediately eight pairs of gulls frantically screamed and flew towards the "intruder". We worried not only about the disturbance to breeding birds and the exposure of the unguarded eggs to predators, but also that the birds might be injured by the whirring drone. The video operator had no intention of bothering the birds and quickly grounded the device. It made us wonder what a less sensitive operator would have done if not familiar with animal behavior.

Silence is a tonic. One of the most relaxing endeavors many people enjoy, including us, is to go to a beautiful place and stare out over wild country and let your imagination wander to wherever it takes you. Sometimes a bird calls or the wind rustles the leaves. It is not only tantalizing to hear but

joyous in its purity - except for the drone noise in the background. It's difficult to hear that little piece of solitude you just had. There are no longer any bird calls. So, how far do you have to go to escape it? You just must learn to always have your ear plugs with you. That's an easier solution than trying to search for another quiet place.

Having drones in a scenic wonderland is like allowing children to play tag in a cathedral. For some, listening to bagpipes in the Grand Canyon would be wonderful, but for us and many others it would be a horrible violation of the natural beauty that people escape to.

Drones can be flown in numerous places where they will not disturb others. They should not be permitted in Oregon State Parks that provide pleasure for so many who seek other kinds of rewards during their visits.

Sincerely, Robert and Gretchen Pederson Deschutes County residents



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Lynne Jeffries

lynnetj@cox.net

Public comment:

• Thank you to State Parks for providing this opportunity. I recommend all state parks and beaches be closed to drone take-off and landings except where they can be safely allowed

- State Parks should determine where to allow drones based on the best available science
- State Parks should create an independent technical working group (including agency, academic, NGO, and tribal experts) to determine appropriate designated drone take-off and landing areas that minimize wildlife, cultural and recreational impacts.
- While designated areas are being determined, status quo drone use would continue (i.e. this would not ban all drone use at any time during the process)
- State Parks should include a final map(s) of designated drone take-off and landing locations on their website
- In areas that are approved for drone use, include in the rules:
- No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.
- Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.
- All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time.
- State Parks should include strong enforcement mechanisms in final rules. Thank you for the opportunity to weigh in on this critical problem in State Parks.

Lynne Jeffries



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Betsy Neeley

bneeley2@charter.net

Public comment:

Thank you for this opportunity to comment on drone impact.

I live in Bandon. I am a volunteer for SEA (Shoreline Education for Awareness). Just beyond my house is the beach. Nearby is Coquille Point which has just been designated as a Marine Garden. Further south is China Creek which during certain months of the years has visitor restrictions because of Snowy Plovers nesting.

With Spring, at Coquille Point there are hundreds (possibly thousands) of CommonMurre who come in from the sea to rest and nest on the offshore rocks. Additionally, there are oystercatchers, Cormorants, Pigeon Guillemot, harbor seals, and a small numbers of tufted puffins nesting.

When Fish and Wildlife workers and volunteers are present on the beach near the rocky shore habitats we can remind visitors (and their dogs) not bother nesting birds that we know are present or a stranded seal pup, for example. It is very difficult to manage any drone activity in the area. The drones are fast, can get close to nesting birds (and if the birds are threatened, can result in abandonment of their nest), and operators are often not visible.

I do not recommend having the drones near the rocky habitats that are used by migrating birds along the Oregon coast as the potential for disturbances to wildlife is great.

Thank you,

Betsy Neeley



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Christopher Conrad

critconrad@yahoo.com

Public comment:

I propose that drones not be allowed in Oregon state parks. Drones are a loud and disruptive hobby to wildlife and other users.

At Smith Rock, I have many times witnessed someone flying a drone during closed raptor nesting season, near Bald Eagle and Peregrine falcon nesting grounds. Even with posted signage at many points over the park, drone operators consistently ignore the seasonal closures. For this reason I vote to just ban them altogether.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Wednesday, April 6, 2022

Commenter name (if provided): Commenter email (if provided):

Kevin Raichl kr@visual-thinking.com

Public comment:

I will look forward to clarification of rules. Please know that I think it important to be able to fly responsibly over ocean shores and state parks. 95% of drone pilots fly safely and with established rules and procedures. Please don't eliminate flying in areas because of irresponsible people.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Chris Hodgdon

chris@overlookdrone.com

Public comment:

Way to go Oregon. As a Part 107 Certificate holder (FAA licensed commercial drone pilot), I am happy to see a state taking a proactive approach in working with recreational drone operators (which I do as well). In this day and age of many out there seeks to make rules that basically say no, no no, your state is taking the lead in making rules that say yes, if you follow the rules.

As a Part 107 holder, I am required to fly at a higher standard set by the FAA rules, but I still fly at that same standard when I am flying recreatinoally. Similar to driving my personal car at a slightly higher standard, since I hold a commercial drivers license. Even recreational flyers are now being held to a slight higher standard that in the past, since the FAA enacted the TRUST program, that all recreational drone pilots are supposed to complete.

I am pleased to see a state that is recognizing that drone flying can be a hobby and can be great for people to do and is will to work with them to give them proper locations to fly from with state parks. I will be watching this close and once its all said and done, will present a similar idea to my home state of Texas.

I understand the concerns people have for the birds, animals and nature, but most states (and at the federal level) already have rules in regards to not messing with animals and such. So these same concerns could relate to a nature photographer on the ground, a fisherman in a lake or a camper while hiking. A drone pilot flying in your state parks (or even just anywhere in the state for that matter) should be aware of the rules involving such encounters.

Currently,for example, here in the Dallas Texas, we have several locations that have bald eagle nests. As a drone pilot I know that I can fly around the area, but there is a minimum distance I must from them, not allowed to follow their flight path and such, but it does not prevent me from getting great drone photos of the area they are located in.

I personally believe with the rules that are being looked at will be a great asset for the state and a blessing to recreational drone flyers and will actually mitigate the concerns of those against the rules.

The one thing I can say for sure is that no matter what, there will always be that one person that wants to break the rules, no matter what it is (speeding, having a fire in a park while open fires are banned, etc), but we cannot allow that to affect the community at large. Putting these rules into

place to make it easier for a flyer will go a long way to helping stop illegal activity.

Please, please consider pushing these rules through and make it better for the drone community and general community all together.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Jerry McMichael

Jkmcmichael@charter.net

Public comment:

Please ban the use of drones in any way in State Parks or on the beach.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Anne Rognesss

a rogness@yahoo.com

Public comment:

Please do all you can to eliminate the use of drones in natural areas and public parks. the presence of a drone flying destroys the experience of enjoying the outdoors, nature and wildlife for all but the one flying it. An overhead drone produces a primal feeling of being stalked, preyed upon and watched, eliminating the relaxation of being in a natural setting. The importance of quiet peaceful places is becoming more and more important as the built environment expands, the health benefits to humans of engaging with nature is documented, let's not ruin this by allowing drones to fly through such places. Thank you



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Brian Landoe

brian.landoe@gmail.com

Public comment:

The regulation of drones in Oregon State Parks is not an issue I have followed closely. As someone who has lived in Oregon for more than a decade and is a regular user of state parks I have generally trusted that the management of these lands will act in the best interest of the public and the environment.

I am shocked and disappointed to learn that instead of doing so, Oregon State Parks is proposing to allow widespread usage of drones. Drones only serve to benefit the pilot at the significant expense of other park users. State Parks offer the rare opportunity to experience the sounds of nature and escape man made noise pollution. They are in fact some of the rare places left where this is possible. It is complete incompatible with the purpose of these lands to allow individuals to so significantly impact the experience for others.

It is truly heartbreaking to consider how these proposed roles could spoil Oregon's incredible public lands. I urge you to make significant changes to only allow drone usage in designated zones.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Mike Faden

mikefaden@gmail.com

Public comment:

Private drones should be banned in state parks except in special circumstances where permission has been obtained . Drones will definitely disturb wildlife; the condition in the current proposed rule that pilots must avoid disturbing wildlife is unrealistic and will be ineffective, not least because pilots will not know the impact or where birds are nesting, etc. Drones are also intrusive and offensive to many members of the public.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Elizabeth Zenger

misha.zen01@gmail.com

Public comment:

Please ban drones in all Oregon State Parks everywhere. They are life-threatening for wildlife and disrupt the recreational experience of people seeking refuge in nature. They are unhealthy for people, too, by setting the nervous system on high alert when a person is trying to relax.

Really, they are anothema for the reasons State Parks exist at all. They also interfere with people's privacy, as they often have video cameras. Please, no drones! Drone operators are a very small percentage of the people who use parks, and they ruin it for the rest of us. I don't see a way to compromise on this one, as the sound carries so far.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Cathleen Connolly

Cathconn@comcast.net

Public comment:

The rule is backwards. I oppose the rule. Drones used by the public should not be allowed in state parks except in designated areas that are clearly marked and controlled. Drones are very invasive and destroy the sights and sounds of nature that I go to the state parks to enjoy. If you create zones for the drone users then the rest of us can avoid those areas and actually enjoy the parks. Perhaps a park in downtown Portland or other urban settings since there is already technological sights and sounds so the drones would fit in.

The exception for public safety or natural resources staff to use drones when necessary to protect public safety or conduct surveys of natural resources is reasonable.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob Snyder

Bsnyder402@gmail.com

Public comment:

I think it is a well written law allowing for safe drone flight.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Susan Smith

susankaysmith@gmail.com

Public comment:

I am an active member of the drone hobbyist community. I fly drones in local parks to practice and have fun. Children and adults alike love to learn more about the drones and see them fly. Drones teach STEM education including engineering, programming, electronics, soldering, video editing and more. They represent an educational opportunity for the next generation. When flying at parks, we are careful to not fly near people or animals. We fly our drones to practice skills, capture the beauty of nature and to have fun.

I would urge the Parks Department to adopt this rule to allow landing and taking off of drones in state parks. This recreational activity will highlight the beauty of state parks and that the state of Oregon is open to modern technology and new forms of recreation.



Oregon Parks and Recreation Department

Proposed rule change:

Wednesday, April 6, 2022

Date comment received:

Take-off and landing of drones

Commenter name (if provided):

Commenter email (if provided):

Cooper Woodruff

cwoodruff07@yahoo.com

Public comment:

Drones are fun, fun is recreation as long as it is not a beast class or xclass there is no issue with drones in the parks



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Bill Smith

odf130ia@gmail.com

Public comment:

Hello and thank you for your time.

Please do not allow a few bad apples ruin what many people do without issue. There are many more folks who do this right then do it wrong. Why should the government impose more rules and laws on the majority because of the minority of folks who aren't concerned with current laws and rules let alone new ones.

By the current rules you cannot hear a drone on the coast due to the footage you need to stay away from people . You currently are not allowed to harass wildlife .

Think about it, you can not currently enforce the rules that you have let alone new ones.

You are going to create criminals over night and or throw people over to the side of not caring anymore, you all don't need any more enemies......your jobs are hard enough as is with what you are given.

Some people will never be happy and will just keep pushing the State around until you finally stand up to them .

As far as inland parks......I imagine there are some spots where drones are unacceptable. Find those spots and post the rules, dont just take the easy wrong and paint with a wide paintbrush because its the easy wayi pay you to take the hard right not the easy wrong. No more, Oregon is already on its death bed by 1000 government cuts.

I beg you, do not implement more rules and laws you can not enforce, do not create more government hate.....be proactive, find a compromise .



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Adam Hodge

adamlhodge@gmail.com

Public comment:

I wanted to reach out and think the state for addressing this it is a wonderful hobby and it is growing. The safe flying of drones will never be an issue and as a community we like to help to keep it safe by keeping our members aware and respectful of others in parks and other areas we fly. We just want the opportunity to get others into this incredible hobby and to use the beautiful parks would be a wonderful setting for this to happen. FAA already has regulations for flight, let's not restrict the beautiful scenery.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Wednesday, April 6, 2022

Commenter name (if provided):

Commenter email (if provided):

Paul Velasco

kingdavidd@gmail.com

Public comment:

in favor of allowing drones take off or land anywhere unless otherwise notes on



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Tuesday, April 5, 2022

Date comment received:

Commenter name (if provided):

Commenter email (if provided):

Michael Hall

michael@ampsolutionsusa.com

Public comment:

Require license to fly drone safely and comply with all FAA rules, nothing else is needed.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Ken Piper kpiper143@gmail.com

Public comment:

I think the rule as written is very fair and responsible. It will be respectful of wildlife and humans. I support the rule as written.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Stan Khlevner

sk@airzus.com

Public comment:

As both a hobbyist and commercial sUAS remote pilot, I believe sensible rules relating to the operation of any sUAS in state parks are very important. I believe the same for national parks as well, but that's a different topic. It is important to consider the exact definition of the word sensible; which according to the Oxford Dictionary is: "(of a statement or course of action) chosen in accordance with wisdom or prudence; likely to be of benefit". But a benefit to whom? Park goers (i.e. the public), drone enthusiast, commercial operators? A balance between all three should be considered. Allocating specific areas in parks where recreational drone flying is encouraged can help younger and older generations feel secure in knowing they can practice a hobby or craft they may choose to turn into a career of the future. Similarly, areas where drones are forbidden can preserve the majesty and beauty of untouched land in the name of ecological conservation. And allowing commercial operators, people who have families to feed and staff to employ, to reasonably request access to all areas while prioritizing safety to ensure all types of work can be done with no impact to the natural surroundings brings can help bring awareness to ecology and the parks themselves. Drones can map cliffs to better assess potential landslide paths and even help ascertain plant growth trends using specialized sensors. Reasonably priced permits (in the \$25-50 range for a few hours use) could benefit both park management and maintenance operational costs and allow for reasonable use by commercial operators willing to respect the rules of the park. It would also be reasonable to allow sUAS operation on certain days of the week, while also completely preventing any sUAS on other days of the week. This way, all parties are appeased in a reasonable manner. As with most things, the best course is typically between the two extremes (complete ban or unregulated use).



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Dirk Houghton

dirk@dirkhoughton.com

Public comment:

I like the way these proposed rules allow drone usage where safe, and will forbid drones where they shouldn't be. We need more common sense rules for drone use.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Cristin Sherlock

cristinsherlock4@gmail.com

Public comment:

As an fpv enthusiast, I support the take-off and landing of drones in state parks. The hobby of drones has a network of recreational use. With acceptable and respectful usage of drones, flying them has been a positive experience for many community individuals. My favorite experience with drones is enjoying a hobby that I can share with others in my community.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Rich Bauman richardb97@gmail.com

Public comment:

The Oregon drone rule language is actually very nicely written. It allows drone flights except where it will cause conflict with people or wildlife.

I like the way the proposed rules allow drone use where safe and will forbid drones where they shouldn't be.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Chris Rhein cwr5033@gmail.com

Public comment:

I think taking off and landing should be allowed inside Oregon State Parks where it is not otherwise a disruption.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Brett Buesnel

brett.buesnel@gmail.com

Public comment:

I am currently serving Tillamook County through OHA's AmeriCorps Vista program. In partnership with the County and Tillamook County Wellness I am working to establish a Mindful Walking Trail program that will provide community members with guidance and education on how they can improve their health with a quiet walk in the woods. Area trails that are secluded from sounds of civilization will be the best candidates to serve as the first to be designated as Mindful Walking Trails, where the community can learn more about how a mindfulness practice can take place in Oregon's natural spaces. I would like to continue this work once my year of service ends in August. The prospect of drones further reducing the acres of land that are currently quiet besides those inherent to the natural space concerns me greatly. One of the least protected and quickest vanishing natural resources our State has is access to quiet spaces. Please restrict drone access to designated areas that are not going to infringe on others potential to experience the space.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Carol Wooley

mcl.wooley@gmail.com

Public comment:

To protect vulnerable wildlife in the park, the use of drones needs to be banned where there are colonies of seabirds during the nesting season. Please consider that the parks need to offer a balanced approach to managing sensitive habitats and wildlife while still allowing for recreational and educational opportunities.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

david benson

dvb@rocketmail.com

Public comment:

I don't believe that such a rulechange is necessary or good. Drones in recent years have become smaller and quieter over time. The level of disruption that they can create when being flown per FAA rules already in effect is minimal. They are already less disruptive than louder vehicles, childrens yelling, dog barking, etc that is (and should be) allowed already.

Drones are providing a good reason for people to get out and experience state parks and encourages exploration and use by another set of people in a non-destructive manner. It could even be a possibility to sell day passes to individual parks that could be displayed by the pilot and make it easily monitorable by rangers as well as have the potential to limit the daily number of drones flying in a given park, where over crowding makes that necessary.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob Mazza

hobbyforu@aol.com

Public comment:

Flying cinematic and freestyle drones is extremely entertaining for those knowledgeable in the sport. It does not need to be over regulated. This isn't a cheap hobby and 99% of them know the basic rules of flight and can do it in a manner that should not bother anyone or the environment. Thank you



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

J Muchele janetmelgin@yahoo.com

Public comment:

I don't want drones in Oregon State Parks. Drones are a violation of mine, and other's right to peaceful enjoyment of Oregon's State Parks.

They disrupt birds and other wildlife. They are disruptive and do not belong in Oregon State Parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Tom C

Public comment:

Rules and laws need to be guided by data and evidence, not perception and opinion. The public opinion is that drones are dangerous, are used to spy on people, are interfering with manned aircraft, and many other fear-based buzzwords when there is very little evidence to support any of those claims. Something that actually can be proven? Drones have gotten young people interested in electronics, engineering, and the sciences. It has gotten young people outside and off their phones. It has improved the utilization of these parks that otherwise go unused because of the ever increasing amount of laws prohibiting more and more activities from happening within them.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Adam Baker

ab33842@gmail.com

Public comment:

Drone pilots are required by the FAA to take a basic knowledge test, and no drone pilot wants to make the others look bad. Drone pilots are responsible as it is their equipment that is lost if they make a mistake. I would encourage this to be approved.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Edward Grogan

awkwardmoose@att.net

Public comment:

Thank You drones are great outdoors and recreationally fun they are safe and makes you want to be outdoors flying plus sensible rules to avoid area's makes this ruling a winner



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Larissa

Public comment:

I love being able to fly my drone and hope that drones continue to be allowed in the parks



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Jeff Houk jeffhouk@aol.com

Public comment:

I would think if drone operators observed a safe zone of 30 ft. for a clearly defined take off/ landing zone (such as a hunter orange landing pad) it would be easy to maintain and safe. As for operation of drones, the height of the trees within 100 ft. should suffice and no people or animals on open ground. In reality, there are so few drone photographers that over complicating rules is unnecessary.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

james Whalen

droningclearimages@gmail.com

Public comment:

I like the way the proposed rules allow drone use where safe, and will forbid drones where they shouldn't be. I took and passed the Trust test and then passed the FAA 107 Pilot test. Safety and following the rules makes everyone safe. Jim



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Howard Hulin

howard@qualityvocalartistry.com

Public comment:

I've been utilizing my drones safely since the very first ones came to market. Before that, I was an avid aerial RC pilot using my skills for not only photography and videography but for search and rescue as well. I believe that those of us who have invested inn becoming Part 107 pilots have demonstrated that as a whole, we are keenly aware of the safety protocols needed to operate safely not only around people but wildlife as well. I believe that only Part 107 pilots should be allowed to operate within any park or recreational area.

For me, not only am I a Part 107 pilot but a Professional Voice Over artist as well that has a series called "Welcome To" where I travel to various locations and create a 5-7 travel video. Look up "Welcome to Swansea Ghost Town", "Welcome to the Alabama Hills", or Welcome to the All American Road on my website: www.qualityvocalartistry.com



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Shane Snyder

Public comment:

Drones in state parks? Why is this even a question being asked? No one goes camping or hiking so they can be watched and photographed by a flying creep. No way.

We had a drone at Prineville Reservoir last summer flying so low over the swim beach we could have hit it with a baseball bat.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Cassandra McAllister

Public comment:

The only times my kids have been in a life threatening horse riding accident was when we encountered drones at Stub Stewart. Drones sound like a swarm of bees to horses so drones can be quite dangerous to have around.

It believe it is the hobbyists who are dangerous. I doubt professional pilots are the ones chasing us while we ride horseback down the beach.

We've been harassed by drones while riding on the beach at Nehalem and Fort Stevens. I am adamantly opposed to drones invading our quiet time out in nature. They are loud, obtrusive and disrespectful.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Matt McLinden

Public comment:

Hello!

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

mmclinden503@gmail.com

Thank you for making rules for drones. I check the state park website before going out. I am an amateur aerial photographer, and I love the viewpoint I get from the sky.

I follow the federal rules, and do my best to make sure I am not bothering anyone. I communicate with the people around me if I am going to take off and land, and I do not bother any wild life.

I would be devastated if there was a blanket rule that one could not take off or land in the Oregon state parks. There is just so much to see, and I strongly believe if done respectfully can show another side to our natural beauty.

I want to respect our birds of the coast, and there are rules for smith rock already.

Thank you for letting me comment,

-Matt McLinden



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Rick McMonagle

zrickmcmonagle@gmail.com

Public comment:

Hello, please accept the following comments on the proposed drone rules:

Drones should be prohibited on all public lands in Oregon including local, county, state and federal lands and including coastal lands and beaches except for the following:

- —approved conservation management projects
- —public search and rescues

Drones are a technological intrusion on the public's use and enjoyment of public lands and nature. They can disrupt solitude experiences which are critical to human physical, mental and spiritual health and well being as numerous scientific research has confirmed.

If they are allowed to be used on public lands, bad actors will harass and drive away wildlife and people. As an example, Oregon State Parks are understaffed and would not have the capacity to monitor and enforce any drone regulations.

Sincerely,

Rick McMonagle Portland, OR



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

William Kielhorn

Public comment:

Dear Persons,

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

bkielhorn45@gmail.com

Oregonians go to their state parks to get closer to nature, to breathe fresh unconditioned air, to bask in natural non-mechanical sounds, and to enjoy wild plants, animals, and vistas unmarred by advertising or other human constructions and manipulations.

They do not go to state parks to watch drag-racing, for example. For that they go to other venues, not to state parks. And no one feels that state parks should cater to the needs of the drag-racing community in spite of its substantial commercial interests. In general, state parks need not accommodate every niche-interest that Oregonians have, especially when the noise and pollution conflict with the core mission of Oregon State Parks.

Likewise, there is no need to accommodate the noisy, visually-offensive, wildlife-harassing drone industry.

Please ban drones from state parks. Do not let them despoil our parks or harass our wildlife!

Sincerely, William Kielhorn



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Ricki Foster

johnwaynepool@gmail.com

Public comment:

As a Bend-area resident, avid hiker and climber, I oppose allowing drones to land and take off within Smith Rock State Park. Smith Rock State Park is, even if only to a small extent, a haven from the civilized world to take in and respect ancient, natural beauty. Drones pervert the very intention of protecting and allowing public access to this geological site. Nature is meant to be respected, savored and earned; drones counter all three, allowing people to disrespect nature and catch pictures and videos without actually taking it in or working for the views. They are annoyingly distracting to climbers and hikers, taking away from the natural beauty and, as a climber, I have some concern over the distraction and over their use near routes on rock walls. They take away from the natural beauty to be found in sight and sound, are distracting and, in such an area of such terrain where climbing is common, raise safety concerns.

Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

William Kielhorn

Public comment:

Take-off and Landing of Drones in Oregon State Parks

Oregonians go to their state parks to get closer to nature, to breath fresh unconditioned air, to bask in natural non-mechanical sounds, and to enjoy wild plants, animals, and vistas unmarred by advertising or other human constructions and manipulations.

They do not go to state parks to watch drag-racing, for example. For that they go to other venues, not to state parks. And no one feels that state parks should cater to the needs of the drag-racing community in spite of its substantial commercial interests. In general, state parks need not accommodate every niche-interest that Oregonians have, especially when the noise and pollution conflict with the core mission of Oregon State Parks.

Likewise, there is no need to accommodate the noisy, visually-offensive wildlife-harassing drone industry.

Please ban drones from state parks. Do not let them despoil our parks or harass our wildlife!

Sincerely, William Kielhorn



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Eric Crawford

crawfordaerialphotography@gmail.com

Public comment:

To Whom It May Concern:

Please allow the use of drones in state parks by professional licensed drone operators.

I am an FAA Part 107 certified pilot and also a photographer. When used in safe and professional manner drones drones allow the natural beauty of coastal areas and state parks to to be captured in ways that is otherwise impossible.

Thank You, Eric Crawford



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Bev Minn

Public comment:

Thank you for this opportunity to comment. I chose the OR coast for retirement, seeking serenity and a closeness to nature. I am not a fan of recreational drone use because of their noise, intrusion of my airspace privacy, and disturbance to wildlife.

Currently, when I see or hear a drone on the beach, I leave the area to avoid a confrontation as inevitably a bird will either confront the drone in the air, or flee to get away from the drone.

Because of minimal law enforcement on OR beaches, drone use should be allowed only in designated areas, by permits which are available through the internet. And, these areas need to be evaluated periodically for appropriate adjustments.

I am not a fan of burdensome permitting and licensing of drone operators, but I think most drone operators are more concerned with operating their drones than the impact their drones are having on other people or wildlife. Therefore, stringent rules for drone operation are necessary.

Having wildlife disturbance knowledge and common sense safety procedures added to permitting/licensing requirements are a must. In addition, all drones should be required to broadcast their location on a "ranger" frequency.

I look forward to you updating your regulations involving drone use in public parks and on coastal beaches. Hopefully, drone operators will soon be able to use their toys and avoid confrontations with other people or wildlife.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Tim Palmer

tim@timpalmer.org

Public comment:

Statement to the Oregon Department of Parks and Recreation and the Oregon State Parks and Recreation Commission regarding the Department's drone rule proposal. Please include the following statement in the hearing record.

From Tim Palmer, Port Orford, Oregon, tim@timpalmer.org April 5, 2022

I'm a professional writer and photographer with 30 books published, including 15 photo books, about recreation, nature, and adventure travel, several of them about Oregon. As a photographer, I do not use a drone, but if I did, I would not use it in any situation involving our parks or beaches, or where birds and wildlife might occur, or in any place where the drone might be seen or heard by other people. The reason for that is that I don't want my recreational or professional activities to ruin anyone else's experience. I know not everyone agrees with this view. That's why it's imperative that the public agency entrusted with the management of our parks and beaches take responsibility for the quality of the public's experience and for the wildlife that are dependent on these habitats.

Our state parks receive 54 million visitor days of use per year. To my knowledge, the Department has no estimate of the number of drone users in the park system. But even if the number is 1,000, that's less than 1 out of every 54,000 visits to the parks. Even 50,000 drones would be only 1 for each 5,000 other park visitors. Whatever the real number is, it's a miniscule minority of visitors that use drones, and for those few, the department's proposal will sacrifice the rights of all the others and the needs of wildlife throughout the park system.

Those of us who go to our parks and beaches seek the natural world for quiet, for peace, and for escape from the racket of other places around us, and to do that we already have to avoid the highways and traffic, the jet skis, snowmobiles, off-road vehicles, trail bikes, chainsaws, leaf blowers, and on and on. Now we have to avoid drones as well, and unlike those other obstacles interfering with a pleasant trip to the park, drones can fly anywhere—overhead, out to sea, in the treetops, up and down our rivers. The proposed rule to allow drones everywhere except in specified sites is the air-space equivalent of allowing 4 wheel drive vehicles to go everywhere off-road.

Why should our state parks be any different from our national parks, where drones are prohibited? The only difference I see is that the managers of our national parks care about the quality of the park experience to the vast majority of their visitors, and they take better responsibility for the

wildlife that depend on the parks.

There are other places where people can use drones—in fact, almost everywhere else in Oregon—and state parks account for only two-tenths of one percent of the land area. Why can't this tiny fraction of our natural estate be protected from these recreational aircraft?

Following the route of permitting drones, as proposed, puts us all on the endless path of fighting over our parks and beaches mile by mile, acre by acre, from now to beyond the foreseeable future. This question will divert park staff from the jobs they need to do and will set our communities of users up for endless conflict. Likewise, enforcement of the policy as now proposed would be difficult if not impossible. Is this the path that you really want us to take? Are these the conflicts that park management wants to face every day into the future? Think now, because, like other intrusions into our parks, once the door is opened, it's difficult to close it.

I've been a proud defender of our state parks against threats ranging from luxury golf courses to water pollution, to dams, and to gorse infestations, and the irresponsibility of this proposal makes me disappointed and disgusted, and I know I'm not alone.

If nothing else, I urge you to not take action on this proposal and instead that you survey the desires of park visitors, that you seek and follow the advice of professional wildlife biologists not affiliated with state parks or the drone industry, that you meet the needs of managers of our adjacent National Wildlife Refuges, and that you hold further hearings on alternatives to this ill-advised proposal. I urge the Department of Parks and Recreation department to rise to the challenge in front of you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Jon Smithers

jon@jonsmithers.com

Public comment:

I believe their can be Locations in the parks on certain days & times that would be beneficial to everyone to allow the use of drones. By following simple rules, this can be done easily & would benefit the parks & the people that visit them!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Victoria Ertelt

victoria.ertelt@gmail.com

Public comment:

Please - no drones anywhere in any state parks at any time. (Exception: professional state employees making videos for promotional/educational purposes.) The parks are there for living beings to experience/live in, not for mechanical gizmos to exploit. And no, someone standing a mile away from a waterfall flying a drone around it is not experiencing it - only the drone is.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Valerie Lantz

trail.horse.rider14@gmail.com

Public comment:

Several Oregon State Parks and beaches have popular equestrian trails, Equestrians have already experienced conflicts about user safety with drone operators. The user conflict and visitor safety issues associated with drone operators and equestrians need to be addressed. An example is a drone operator disregarding the safety of equestrians when "buzzing" individuals on horseback. Horses unfamiliar with drones may react rather dramatically and possibly endanger the rider's safety. Many riders use the State Park trails for learning how to trail ride or teaching a young horse about trails because State Park trails have a history of relatively safe places. In my opinion, drone operation over campgrounds AND TRAILS should be excluded.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Richard Hathaway

richhathaway@comcast.net

Public comment:

I'd like to comment on the proposed regulation on the use of Unmanned Aircraft Systems (UAS, aka drones) in Oregon's state parks. The current wording strikes a good balance: Pilots may take off and land within state parks, except where and when such activity is restricted. That's exactly how it works on the federal level: UAS pilots can fly in most of the U.S., except when and where the FAA has restricted it. So there is precedent for that approach, and it works very well.

I understand, however, there is a faction that wishes to impose a total ban on all UAS take-offs and landings -- and therefore aerial photography -- within Oregon's state parks, except in designated "fly zones" determined individually by the state's 250+ park jurisdictions.

I live in a county with laws similar to what that faction is proposing: UAS operations are banned in county parks, except in designated areas. Well, the sad fact is that NO fly zones have ever been designated for UAS operations. In effect, UAS pilots cannot photograph some of the most scenic parts of our county. Oregon's parks are beautiful. I urge you not to impose similar restrictions on an enjoyable hobby.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Alex Urbach alexjurbach@gmail.com

Public comment:

Taking off and landing of Oregon's expansive state parks is merely harmless. Do I oppose regulations of usage of drones in state parks no, but to outright limit the take-off and landing of drones? Absolutely. Drone operators should still enjoy the freedom to fly within state parks as long as certain regulations are followed.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Gustavo Medrano

nvestwme@yahoo.com

Public comment:

I believe drones should be able to operate in the parks and forests to be able to show the beauty of everything it has to offer as long as it is done safely. Most drone pilots take their licenses seriously and would not do anything which would cause harm. Please allow those who can not visit, be able to see through our eyes, the drones.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Ron Jorgensen

ron@bayareastudios.com

Public comment:

I think licensed drone pilots should be allowed to fly in state parks. Recreational in designated areas. You have some great sights and they should be shared.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Benton Elliott

benton.elliott@gmail.com

Public comment:

I am writing to voice my opposition to drone operations in our state parks. They are a visual and auditory intrusion on nature and human sensibilities as well as a danger to park visitors. Let us enjoy some small piece of nature in peace. Thank you.

Benton Elliott Eugene



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Richard Provencher provencher.dick@live.com

Public comment:

Drone operators are interested in photography and nature settings. We all enjoy the parks and are very much interested in safety for all.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

R Anderson

Public comment:

Thank you for this opportunity to comment on the use of UAS in Oregon state parks. At a time when we have lost so many natural areas to logging, development, and fires, we already have extreme pressure on the remaining areas that are available for wildlife habitat and non-motorized recreation. I have had a number of adverse experiences with drones harassing hikers and/or wildlife.

A number of the drone users who have commented here have mentioned that they love to share their photos with the public. Unfortunately, the noise, intrusions on privacy, and potential safety issues cause stress to other people and to wildlife in the areas where drones are used. A single drone user can adversely impact the outdoor experience for dozens of other users. One drone-using commenter suggested that they would be willing to avoid parking lots - so the rest of us would have to huddle there to avoid the drones??? And many of the pro-drone commenters noted that they want to fly drones in Oregon because they are prohibited at state parks in their own states. Perhaps their home states already know something that Oregon should not have to learn the hard way.

If you must allow recreational drone use in state parks, reasonable rules should be established. Include representation from wildlife biologists, recreational users, and other relevant interest groups (not just drone users) in the team drafting the regulations. Require that drone pilots have FAA or other equivalent certification. Require an application process, where the pilot will acknowledge that they have been informed of sensitive and prohibited areas within parks where drone use is otherwise permitted. Do not allow recreational drone use in areas with endangered or threatened wildlife, or in areas with large concentrations of people, as in the Columbia River Gorge.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Jim Willson

jgwillson628492@gmail.com

Public comment:

This is an excellent rule. It clear define what is acceptable and unacceptable operation of a drone. It enables both recreational and professional UAS operators to capture the stunning beauty or Oregon's Parks, which is good for promotion of our park system. It clearly declares that drones shall not harass wildlife or other park participants.

There are areas with respect to safety where this regulation can actually be improved. The regulation can specify that UAS operators be required to present their operator's certification to park officials upon request, provided that the drone is not airborne. In case of the drone being airborne, park officials shall wait until the drone has landed.

Another area of improvement is language that protects the UAS operator from harassment from other park visitors. Distractions caused by others unaware of the legality of the UAS operation can cause the operator to lose sight of the UAS and enter into an undesired aircraft state.

Other than those two additional adds, this is an outstanding step in the right direction. More public awareness of the benefits of UAS can only lead to better public acceptance.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Sarah Mattox

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

porches.bagpipe 0b@icloud.com

Public comment:

The recent use of drones by private citizens has opened a whole new world that is becoming increasingly difficult to manage. Drones can be extremely noisy and have a negative impact on the natural soundscape, wildlife, as well as other visitor's experiences. Seeing and hearing a drone in a natural space is a violating experience which includes the very serious issue of personal privacy. Many people don't want a drone flying near them, taking photographs, or filming a video without their consent, let alone ruining their experience in nature. And I can't begin to imagine how disruptive a drone must be to the multiple species of wildlife that live within our state.

Management agencies need to not be afraid of protecting our privacy rights, the rights of wildlife, natural soundscapes, and wilderness and park experiences by enacting and enforcing laws prohibiting the use of drones.

Drones are already prohibited within all national parkland boundaries by regulations in the Code of Federal Regulations Thirty Six CFR 2.17(a)(3). Our Oregon state parks should not be an exception.

Are we really at the point where human entertainment is more important than the preservation of nature and the respect and empathy toward other human beings? I surely hope not. It is time to ban drones from Oregon state parks so the rest of us can still find quiet, uninterrupted, natural spaces, without the interruption of intrusive, made made machines.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Holli Christensen

Public comment:

Thank you for considering my comment.

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

holli.christensen@icloud.com

In my opinion, drones in public places are an annoyance, at best. We value scenic and wild places for their unique qualities of beauty, solitude and wonder. We take pains (although too little and too late for some) to preserve wildlife habitat and leave breeding areas undisturbed. There is no reason to allow drones in or near state parks where there is opportunity to wreak havoc on all the above. Seems very unlikely that any rules could and would be enforced.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

S Watson

sandj0704@gmail.com

Public comment:

As an Oregon resident who enjoys our State Parks my concerns about drones operating in the parks are privacy issues, noise, and visual detraction from the nature I'm there to enjoy. If I'm picnicking, or relaxing in a campsite, my privacy is being invaded if someone operating a drone flies it and perhaps even hovers it over me,

(I've had that experience in my own yard).

The noise and visual detraction affects local animals, as well as humans looking for peace, quiet, and the sounds and sights of nature.

There are many places where the sight and sound of drones would not be very noticeable, but there are precious few places where one can even hope to get away from human-made machine noise and relax in the presence of the sights and sounds of nature.

I hope you will take concerns like mine into consideration.

Thank you,

Sarah Watson

PS, a 'funny' story.. A couple of years ago my husband and I were seeing the Blue Basin in the John Day fossil beds area of Eastern Oregon for the first time. We happened to get to the trailhead just as a guided tour was taking off on the trail so we joined it. It was a nice hike, with several families with kids that were eager to learn about the area. At the end of the trail in the blind canyon, the park ranger suggested that if anyone wanted to stay behind, to experience the unusual quiet of the area, except for the sweet sounds of the birds nesting in the cliffs, they should. We were glad to take her up on it and stayed behind as everyone else went back down the trail. After just a few minutes of relaxing there I heard the sound of a motor. At first it was just background noise and didn't quite register, then it got louder and I thought there must be a road not too far off and it sounded like a motorcycle. Lo and behold I soon saw a drone coming over the top of the cliff and flying around the end of the canyon. We felt viewed 'from above', and of course the whole experience was spoiled. ~



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Ben Enticknap

Public comment:

April 5, 2022

Lisa Sumption, Director Oregon Parksand Recreation Department Salem Headquarters 725 Summer St. N.E. Suite C Salem, OR 97301 Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

benticknap44@gmail.com

RE: DRAFT OPRD Drone Take-off and landing rules

Dear Director Sumption,

The draft Oregon Parks and Recreation Department Drone take-off and landing rules should be further strengthened to limit where unmanned aircraft systems (drones) can be operated and they should clearly articulate that drones are prohibited in Oregon's State Parks and beaches unless otherwise allowed in designated times and areas. The rules could allow for limited use under a special permit for activities like environmental research. In other words, state parks should be closed to drone use unless in areas that are specifically open.

Oregon's state parks are exceptional for their natural beauty, habitat for wild animals and plants, and their historical and cultural significance. They are also much needed and frequently visited places for outdoor recreation. Drone operations in these natural areas risk disturbing both the wildlife and the visitors there who are seeking to experience the beauty and wonder of our state park system. Without stronger rules, irresponsible and reckless drone operations will be inevitable. The drones will continue to risk the safety of animals through direct collision and disturbance. Other park visitors are at similar risk from collision and they will also be distrubed by their noise and sight. And the drones are usually recording video. This means they can also violate the privacy of individuals by collecting their data and images.

I urge you to adopt stronger rules that would prohibit drones in Oregon state parks unless specifically authorized by special use permit and/ or only in designated open times and areas where there will be no conflict with other park visitors or wildlife.

Thank you,

Ben Enticknap Portland, Oregon



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

J Summers

jodenesummers@gmail.com

Public comment:

As a former employee and avid state park user, I don't mind the use of drones as long as they can be traced back to the users. I would suggest an online permit process. Filled out same day or week in advances. Permit required but free with details of individual and possible drone description.

The remote nature of drones and preceive anonymity may lead to inappropriate behavior and I would like to see an avenue in place to track those individuals and issue fines if need be. User with honorable and respectful behavior shouldn't have a problem with not being anonymous.

While hiking, biking, climbing or swimming in a state park; I have an expectation of privacy... or at least a personal interaction with fellow users. Not the case with a drone.

Thank you, J Summers



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Keri-Lynn Bell

kerilynnbell@gmail.com

Public comment:

I live next to a state park. Drones fly there all the time regardless of the rules.

How many of they kids have caused a problem? ZERO! Drones are not going to destroy our parks.

I would have designated takeoff/landing areas that are blocked off from people to make things safer.

Bottom line, do you want to have a safe place for drone operators, or continue to have them fly over parks anyways?

Thank you, Keri-Lynn Bell Part 107 Pilot since 2016.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert Wise

bobnwise@gmail.com

Public comment:

Please don't approve drones in state parks. The noise will ruin the experience of the natural environment and intrude on personal enjoyment. I would be tempted to try to destroy any drone invading our space and hiking trails and beaches.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Sarah W.

Public comment:

As an Oregon resident who enjoys our State Parks my concerns about drones operating in the parks are privacy issues, noise, and visual detraction from the nature I'm there to enjoy. If I'm picnicking, or relaxing in a campsite, my privacy is being invaded if someone operating a drone flies it and perhaps even hovers it over me, (I've had that experience in my own yard).

The noise and visual detraction affects local animals, as well as humans looking for peace, quiet, and the sounds and sights of nature.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Tony Blei

tonybleiphoto@gmail.com

Public comment:

I am a Part 107 licensed UAV pilot. I purchased my drone after becoming licensed and I've learned a lot in the past month.

Commercial drones are a part of our life. They are used for fun as well as commercial uses. They are vital for law enforcement and other First Responders. Yet if public spaces are closed to launch, recovery or operation there will be no places for UAV enthusiasts to learn or practice aerial flying.

It is important for every pilot to log flight time so that we can SAFELY fly and be more efficient with our flight time. It will take an inexperienced pilot longer to complete her sortie. And if risk and safety are an issue it is important to have an experienced pilot at the helm.

Allowing drone pilots to safely operate their aircraft in parks and other public spaces is in the public's best interest.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Royden Lepp royden.lepp@gmail.com

Public comment:

Everybody benefits from capturing the beauty of our parks in all methods, spreading that beauty is crucial to saving our green spaces. Drones are misunderstood unfairly ruled against. My drone flies for 5 mins (top battery lifetime) and I get complaints while my son is attacked on a trail by an off leash dog. 'Recreation' has a definition.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Public comment:

I oppose the public use of drones in state parks except in the cases of life-safety. They are a complete annoyance and violate the very reason many people visit such areas.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Jeff Pokorny

jlovesski@gmail.com

Public comment:

ABSOLUTELY NOT!

Drones are an example of one persons rights to express their desires at the dismay of MANY others that are exposed to their actions.

Drone operation is 100% counter to the purpose of parks to allow people a peaceful escape from hectic everyday life.

We were hiking at Iron Mountain and heard this annoying artificial buzz during the top 1/3 of the ascent. It ruined our trip!

Drones are NOT natural and do not belong in state parks designed to be natural experiences.

I despise the operation of these things, and will voice my feelings if I witness someone operating a drone in one of these spaces.

Thanks! Jeff Pokorny Bend, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Pacileo

markpacileo@gmail.com

Public comment:

As a drone pilot, this rule seems to be a good compromise between use and protection. No real drone pilot wants to purposefully disturb animals in their habitat or people enjoying nature. Drones do offer amazing opportunities to take photos and videos from a different perspective. My only hesitation would be with rangers who might be arbitrary in how permission is given. I would hope permission would be more like signing in as is often done when hiking on trails.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Joe Fagan 0.isle-late@icloud.com

Public comment:

It's nice to see a municipality making some reasonable and balanced drone regulations. These seem like fair regulations with reasonable accommodations for drone operators and the general public good.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob Roney

babaroney@yahoo.com

Public comment:

I favor the new regulations regarding drone take-off and landing zones. They are the fairest and most logical approach to regulating this new technology that I have seen. Good job, Oregon Parks and Recreation Department!

Many anti-drone comments are well-meaning and make sense. For example, bird nesting sites and seal pupping areas should not be disturbed by any park use. This would include such activities as the close approach by dogs, kite flying, drones, or for that matter, bird watchers. These natural processes seem to be seasonal. Therefore, temporary flight restrictions should be posted in those areas. Other resources require year-round protection where drone (take-off and landing) and other incompatible use must be banned altogether.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Brandon Thompson

flippinthompson@gmail.com

Public comment:

This rule looks entirely reasonable and fair to everyone, and does not appear to infringe on anyone's rights. I absolutely support this rule.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Lisa Macy-Baker

macyl20@yahoo.com

Public comment:

I agree with all proposed rule changes to further restrict drone use in our state parks and on our beaches. While I believe the proposed rule changes are a step in the right direction, I would support further restrictions as I'm concerned how OPRD will enforce any of the proposed rules.

My family and I are avid ocean and beach users for many forms of recreation including dory fishing, surfing, beach combing, crabbing, and running. We have been doing so for over a century. The increased use of drones in the Pacific City/Tierra Del Mar area greatly diminishes our recreational experience and greatly increases safety risks. Just last month, during a surf session at Pacific City, a drone swarmed and circulated me for 5 minutes. It was distracting, loud, intrusive and scary. It was so close that I was worried it would hit me. It's unfortunate that this is not the first time this has happened.

Thank you for your time and consideration.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Phil Scuderi

phils421@hotmail.com

Public comment:

There are already strict rules outlined by the FAA. The rules clearly outline flying around people. We're we can fly, how we can fly. What areas are safe and unsafe to fly in. Or restricted. I don't understand why one would outline were a person could take off and land. Or even how Oregon would implement or In force such a rule. would you have take of and landing zones in every park. Every couple miles along the beach. It seems impossible. This is supposedly the land of the free, but we make rule for ever last thing. Now we are going to police toys. what a wast of time and energy. I think we have bigger problems to think about. Like maybe the needles all over Oregon parks. Way more dangerous and disturbing then toy drones.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Elie Bulka

elie.m.bulka@gmail.com

Public comment:

I am a hobbyist drone operator with strong background in videography. I make quality videos of all the amazing sites of the Oregon parks and shoreline, which are then distributed to friends and family. They are much enjoyed and help in cultivating the love for the natural beauty around us. Please don't take this away from us.

Respectfully,

Elie Nulka



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Richard Tillich 20lbking@gmail.com

Public comment:

As a drone pilot, I respect the privacy and safety of others, nor do I have a desire to harass others, animals or wildlife. I do appreciate recording scenery and Oregon has a lot to offer. A view from the air, even better at times. I respectfully ask that the use of drones be allowed.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Arnold LeVine alevine@takeourpicture.com

Public comment:

This is a common sense approach to drone usage. Allowed except where a drone would interfere with wildlife and humans.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Emily Dayton

emilyferndayton@gmail.com

Public comment:

Dear OSP staff,

As a biweekly state park user, I kindly encourage OSP to block all recreational drone usage at state parks.

As someone who suffers from C-PTSD and lives on a busy highway, SFSP is an imperative solace for me to access nature and relief anxiety I have related to loud noises. If OSP allows free drone usage, sufferers of PTSD will not be able to relax or unwind within these important protected natural treasures.

I am also an avid bird watcher, drones can disrupt nests, cause unprovoked bird fights, as well as disrupt sensitive habits.

https://www.thespruce.com/birds-and-drones-3571688 I am also a parent to a child who has disabilities and chronic complex medical conditions, who also becomes triggered from loud noises. We must be individuals safety and the safety of our sensitive wildlife first. Being a drone user is a privilege that has become disruptive to our sensitive flora, fauna, and folx who have PTSD.

Thanks for your support,

Emilyfern Dayton Silverton, Or. 97381



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Ram Papish

rampapish@gmail.com

Public comment:

Please see the attached comments. Thank you for considering.

Ram Papish



750 NE Meadow Hill Dr., Toledo, OR 97391

Oregon Parks and Recreation Department

Attn.: Katie Gauthier,
725 Summer St NE, Suite C,
Salem, OR 97301

Dear ORPD,

I am writing to express my desire to see drone usage restricted on Oregon State Park lands. I have lived and worked on the Oregon Coast most of my life and am disturbed to see the number of drones increasing in the preserved natural places I love. Personally, I have seen the negative effects of drone usage on coastal wildlife. I have witnessed seabirds and shorebirds flushing off cliffs when drones fly above them. It is time for sensible drone regulation that includes closure of areas near seabird nesting and marine mammal haulouts.

I understand that some people question the extent of drone impact on wildlife. Whether or not people "believe" drones don't negatively impact nesting wildlife shouldn't be factored into any decision because peer-reviewed research illustrates drones can and has caused nest failure of several species of seabirds and beach-nesting birds including terns, oystercatchers and plovers. The 2021 case of 3,000 elegant tern nests at Bolsa Chica Reserve, CA, failing due to a single drone incident is a recent devastating example of the impact. The seabirds on the coast of Oregon don't have alternative sites for nesting. They select these islands and rocks because they provide some measure of protection from predators like raccoons, dogs, coyote, rats, possum and more. The islands and sheer rocky outcroppings where they nest need to be free from human disturbance like climbing, off leash dogs, and more. But drones now reach where humans and dogs cannot and these drones are perceived by some nesting birds as predatory raptors.

Speaking broadly, there are many factors today impacting coastal wildlife. Habitat loss. Climate change. Ocean Acidification. Development for energy. Something like climate change is very hard for agencies to get a handle on or even control slightly. Controlling drone disturbance is, by comparison, easy and impactful. It is the low hanging fruit that makes a difference. It is one clear and direct way that an agency can limit human impact on wildlife.

While threats to wildlife are my greatest concern, it is my personal feeling that too many drones degrade my experience enjoying the parks, beaches and rocky shores coast. Simply put, drones diminish the experience of the natural environment for me and for many other people. A simple norm in society is that we don't engage in activities that are annoying to other people. Evolving technologies mean evolving ways for humans to interact with each other. Under the cloak of advancing technology, it seems that drone operators are given license to annoy others and diminish their experiences in parks. Please help put a check on this.

I understand that drone enthusiasts are motivated by their hobby to support unrestrictive policies in parks. I believe the vast majority of people are merely annoyed by drones. They are the silent majority of people who aren't involved with the issue enough to send you a letter. During the rule-making process please keep this silent majority in mind.

Hundreds of thousands of visitors come to the coast to enjoy the inspiring tranquility of the natural environment here. Drones are not compatible with the relaxing natural experience most visitors seek. A few drones probably aren't a big problem, but excessive numbers of drones may discourage visitation. The user experience is especially impacted at high-density areas, so regulation could focus on restricting use in those areas. We don't want people leaving the coast saying "It was beautiful...but there were drones buzzing all over the place." Increased drone usage could eventually hurt the tourism industry and the economy of coastal areas.

I realize that you need to take everyone preferences into account and that you will be taking a balanced approach. As you determine this approach, drone regulation that includes closure of takeoff and landing near seabird nesting islands and marine mammal haul outs must be at the forefront of policy. Oregon Islands National Wildlife Refuge already prohibits the takeoff and lands of drones from refuge lands. Please make the rules and policies the same on adjacent State Parks. Also consider restricting drone use at high-density visitation sites to help preserve the visitor experience. I would support a requirement to have drone operators purchase an annual permit that includes etiquette guidelines to cover UAS operation. Thank you for the opportunity to comment.

Thank you for your consideration,

Ram Papish

Toledo, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Dennis Selke

dselke@newschoolarch.edu

Public comment:

My role is educator, I use drones in classes for construction management pros. The need for a permit process and dedicated launch and landing is important for both the site survey aspects of maintenance and construction as well as educating the future generations in current practices and tools.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Chris Dodge

Public comment:

To whom it may concern,

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

chris.c.dodge@gmail.com

I really appreciate that this issue of drone usage on the Oregon coast is being addressed and that you've opened it up for commenting and input from the public.

This issue has concerned me for quite some time. Our coast is so beautiful and it has bothered me that people's need to get a good photo or video for social media could be disturbing birds nesting on the beach and other wildlife, not to mention the impact it has on being able to enjoy a peaceful day on the coast without the buzzing of drones overhead.

I realize it's not realistic to try to make it illegal to use drones entirely on the coast but I do hope that State Parks can create a map with zones where it's legal/illegal to ensure that no drones are allowed to take off/land/fly in areas where birds like the Snowy Plover or Black Oystercatcher are nesting and could be disturbed. State Parks should use current science and information available to determine when and where it will be safe for drone usage. They should confer with various other agencies who can provide the data needed to make these decisions. They should have strong enforcement in place to ensure people follow the rules and they should have the maps reviewed periodically to make sure they still make the most sense for the wildlife impacted.

Many thanks for your time and attention to this matter and for allowing us to offer our input.

~Chris Dodge



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Rob Ryan rwryan1@comcast.net

Public comment:

I applaud the way the proposed rules allow drone use where safe. I appears to be a fair and sound proposal for fellow drone owners.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Chad Lemmens

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

chad.lemmens@lemmenscreativedesign.com

Public comment:

I truly appreciate the thought leadership that was put in to writing out these potential rules around drone use in and/or around the parks within Oregon. Truly appreciate the attention you paid toward landing and flight around animals and the public, as these are the most important concerns. The details are true to the ability to operate safely and in coordination with either park leadership and/or the state rules. The only change I would recommend would be to also include language on the FAA restrictions applied to air space and where those would apply. This would help layer the topics from including the state specific park operation rules while continuing to address how they work within the confines of the federal FAA rules (where applicable).



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Izzy Mohamed

Public comment:

Thanks for your efforts. I think this is a great idea to encourage a safe environment for all pilots while not completely limiting flight in parks. Parks are some of the most beautiful environments for drone pilots to fly and considering safety, it's a pretty safe place to fly as well. Restricting flight around high-traffic areas and areas that may not be as safe for pilots to maintain visual line of sight is a great compromise. I hope to see other parks have similar initiative! with the right knowledge, I think we can all enjoy our hobbies in fun and safe manner.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Ram Papish

rampapish@gmail.com

Public comment:

Dear ORPD.

I am writing to express my desire to see drone usage restricted on Oregon State Park lands. I have lived and worked on the Oregon Coast most of my life and am disturbed to see the number of drones increasing in the preserved natural places I love. Personally, I have seen the negative effects of drone usage on coastal wildlife. I have witnessed seabirds and shorebirds flushing off cliffs when drones fly above them. It is time for sensible drone regulation that includes closure of areas near seabird nesting and marine mammal haulouts.

I understand that some people question the extent of drone impact on wildlife. Whether or not people "believe" drones don't negatively impact nesting wildlife shouldn't be factored into any decision because peer-reviewed research illustrates drones can and has caused nest failure of several species of seabirds and beach-nesting birds including terns, oystercatchers and plovers. The 2021 case of 3,000 elegant tern nests at Bolsa Chica Reserve, CA, failing due to a single drone incident is a recent devastating example of the impact. The seabirds on the coast of Oregon don't have alternative sites for nesting. They select these islands and rocks because they provide some measure of protection from predators like raccoons, dogs, coyote, rats, possum and more. The islands and sheer rocky outcroppings where they nest need to be free from human disturbance like climbing, off leash dogs, and more. But drones now reach where humans and dogs cannot and these drones are perceived by some nesting birds as predatory raptors.

Speaking broadly, there are many factors today impacting coastal wildlife. Habitat loss. Climate change. Ocean Acidification. Development for energy. Something like climate change is very hard for agencies to get a handle on or even control slightly. Controlling drone disturbance is, by comparison, easy and impactful. It is the low hanging fruit that makes a difference. It is one clear and direct way that an agency can limit human impact on wildlife.

While threats to wildlife are my greatest concern, it is my personal feeling that too many drones degrade my experience enjoying the parks, beaches and rocky shores coast. Simply put, drones diminish the experience of the natural environment for me and for many other people. A simple norm in society is that we don't engage in activities that are annoying to other people. Evolving technologies mean evolving ways for humans to interact with each other. Under the cloak of advancing technology, it seems that drone operators are given license to annoy others and diminish their experiences in parks. Please help put a check on this.

I understand that drone enthusiasts are motivated by their hobby to support unrestrictive policies in parks. I believe the vast majority of people are merely annoyed by drones. They are the silent majority of people who aren't involved with the issue enough to send you a letter. During the rule-making process please keep this silent majority in mind.

Hundreds of thousands of visitors come to the coast to enjoy the inspiring tranquility of the natural environment here. Drones are not compatible with the relaxing natural experience most visitors seek. A few drones probably aren't a big problem, but excessive numbers of drones may discourage visitation. The user experience is especially impacted at high-density areas, so regulation could focus on restricting use in those areas. We don't want people leaving the coast saying "It was beautiful...but there were drones buzzing all over the place." Increased drone usage could eventually hurt the tourism industry and the economy of coastal areas.

I realize that you need to take everyone preferences into account and that you will be taking a balanced approach. As you determine this approach, drone regulation that includes closure of takeoff and landing near seabird nesting islands and marine mammal haul outs must be at the forefront of policy. Oregon Islands National Wildlife Refuge already prohibits the takeoff and lands of drones from refuge lands. Please make the rules and policies the same on adjacent State Parks. Also consider restricting drone use at high-density visitation sites to help preserve the visitor experience. I would support a requirement to have drone operators purchase an annual permit that includes etiquette guidelines to cover UAS operation. Thank you for the opportunity to comment.

Ram Papish Toledo OR



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Justin Melanson justin@aerasfog.com

Public comment:

My name is Justin Melanson I am currently the Chair of the UAS Economic Development Committee for PennDOTs UAS Integration Taskforce and the owner of a drone technology company AERAS. Drones play a vital role in the sustainability of our parks and recreational areas. In Pennsylvania we use them to scan for geological inconsistencies, landslides and aid in search and rescue efforts to name just a few. I support the Oregon drone community in their endeavor.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Willing Opean

willingopenears@gmail.com

Public comment:

I support the proposed language, and think that it's a very good compromise that not only gives drone owners great places to recreate, but also protects many areas where drones don't belong.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Frank Truncale soundshooter@yahoo.com

Public comment:

I think the rules as written are a fair and equitable compromise for both parkgoers and flyers. I do not see it necessary to change the wording to restrict takeoffs landings and operations any farther.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Gerard Aque

gerard_aque@email.com

Public comment:

I approve of the rule as written. I feel drone pilots should be able to fly within state parks and coastal areas as long as they don't lose a danger to people, wildlife, and the geography.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Mike Brewington

mbrew12@comcast.net

Public comment:

I support the proposed rule. As a photographer and licensed Part 107 UAV operator, I appreciate and respect the beauty and sanctity of the Oregon Parks. I have no use for the untrained, unlicensed operators that give the rest of us a bad image. My drones equipped with decent cameras are used solely to capture and share the beauty that surrounds us. Often the people we share with are mobility restricted so this is their only way of enjoying the splendor and beauty.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Sharon Rossmark

sharon@womenanddrones.com

Public comment:

Thank you for the opportunity to provide input in support of allowing drone flights in your state parks. Concerns about bad actors should be overshadowed by the FAA education requirements for recreational and commercial drone pilots which specifically address safety protocols for flying drones.

Key issues you should consider:

- Videos captured of the Oregon State Parks would make wonderful free marketing of your beautiful state as individuals share their videos and photos with friends and family on social media
- It's a great way for others who are unable to travel to your state to see the beauty and wonders of Oregon

I support the way the rule is written.

Thank you!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Tammy Bennett

tamarose2000@yahoo.com

Public comment:

I hope the rules continue to allow people to fly drones in park areas. Designate areas to fly that don't disturb others. Let's share the parks!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Marie-Louise Alderton

mlalderton@gmail.com

Public comment:

Thank you for this wording! It is a great compromise for all to enjoy the parks! I love sharing beautiful nature footage with my mom who is in a long term care facility.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Aaron Shell

aaronredbaron@gmail.com

Public comment:

I like that this rule allows for a safe area for hobbyists to participate in the hobby. Please also consider areas where hobbyists can fly slope gliders, there are only a few select spots that work for this type of flying because of the shape of the hill and wind requirements. Cape Blanco, for instance, is an epic location for flying RC gliders without an engine, for instance, please don't take that away from us!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Corbett Campbell

Public comment:

As a licensed Part 107 pilot as well as a videographer and photographer I urge you to continue keeping drone regulations as currently proposed.

I personally love the unique ways that drones can safely capture and document landscape and wildlife that you can't otherwise see.

I love sharing the beauty of our state parks and hope you will continue to look for a solution that uses accountability and education instead of adding on restrictions.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Jake Mel hlam17@yahoo.com

Public comment:

Please promote the freedom by allowing the use of drones where it's safe. More restrictions - less freedom. In my opinion, Oregon was always and should stay the land of the free.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Calvin Boland

csboland@gmail.com

Public comment:

The operation of a UAV (drone) has developed into another avenue in which photographers can access areas and perspectives that were previously out of reach. If an operator is part 107 certified, they are versed in safe operation and understand that flying over people and near protected wildlife is not allowed.

State parks are created for people to enjoy, wether it be fishing, frisbees, or photography.

I am writing to deny the restriction of UAV operation by responsible people in Oregon state parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

John LaScelle

mavric33@gmail.com

Public comment:

I am an FAA part 107 certified drone pilot, in a world of people making knee-jerk overreaching rules to restrict drone flight I want to make a call for a balanced approach. Regulations, rules, and ordinances should be about making sure the public is informed about hazards and making lines that punish bad actors, not preventing all people from enjoying something which can be enjoyed with little to no impact! I support allowing drones, but setting reasonable boundaries as opposed to blanket bans. This is a good and fair rule for all! Thank you for your time!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Martin Fisher

martin.fisher84@gmail.com

Public comment:

I am opposed to allowing the take-off and/or landing of drones in Oregon state parks. In fact, I'm opposed to allowing drone use at all. Oregon state parks are land protected for the peaceful use of all people. Drones are obnoxious, both visually and aurally. It's incredibly frustrating to be hiking or taking in a gorgeous view, only to have a drone whizz by. Please do not allow drones in our state parks.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Regan Fisher regan.fisher@gmail.com

Public comment:

I am opposed to allowing the take-off and/or landing of drones in Oregon state parks. In fact, I'm opposed to allowing drone use at all. Oregon state parks are land protected for the peaceful use of all people. Drones are obnoxious, both visually and aurally. It's incredibly frustrating to be hiking or taking in a gorgeous view, only to have a drone whizz by. Please do not allow drones in our state parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

John Nicholas

johnnicholas67@gmail.com

Public comment:

Spending time in the outdoors plays a huge part in my mental well being and happiness. Drones are by necessity are powered by small rotor blades rotating at high rpms. The high frequency sound generated by these blades hits me the same way as a mosquito buzzing directly in my ear and takes me completely out of the experience I'm having. It negates much, if not all, of the enjoyment and benefits of being in a natural space and unlike mosquitoes, there is no recourse like bug spray or movement.

I am an aerospace engineer and I understand the FAA is the regulator agency for flight. Limiting drone activities (within regulatory authority) to areas where the focus is not being in nature will minimize the impacts to other users.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Doug Stump

dougstump2000@hotmail.com

Public comment:

As a drone pilot I fly respectfully and never harass the wildlife or fly around people. respect goes along ways. I have captured photos that are so amazing and views that are mind blowing. These would have been impossible to get without the use of a drone. I feel banning drone use is not the answer but I do feel that a permit system would be a good idea and limit the number of daily permits to lower the impact of use. This would also insure that any one using a drone is licensed to do so and knows the drone laws to prevent careless users from flying at free will and anyone caught with out the daily use permit could be subject to heavy fines. Maybe even have a short online drone use quiz that must be passed before receiving the daily use permit. I would personally be happy to pay a small use fee and that could help generate funds for the park system to help with upkeep and improvements.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Thomas Keeton

tomk@keetonking.com

Public comment:

There is so much disinformation about drones! This rule at least makes an attempt to honor all parties. It allows drones to fly where it is "safe" and not where it isn't.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Carie Ernst

carieberry@gmail.com

Public comment:

I think this is a common sense rule that allows drone operators to reasonably combine two hobbies, the love of flying and the love of the outdoors.



Date comment received:

Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Steven Kukuruza flywithmesdk@gmail.com

Public comment:

If the rule making committee were to scan through You Tube they will see some of the most beautiful videos in existence. If the rules are changed and drones are not permitted the flights will not be stopped but rather artistic drone videographers will become violators. All these proposed rules will only cause more confusion and more enforcement problems. There is really no need for this rule and the issue should be left as is.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Chris Lounsbury flyinghi808@hotmail.com

Public comment:

If you are a licensed drone pilot doing a job then you know the rules and are just a responsible as a helicopter or airplane pilot in the same airspace.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob Bartholomew

idbart@centurylink.net

Public comment:

As a frequent visitor to Oregon State Parks and a drone enthusiast I would like to encourage rules that allow the hobby flying (including take off and landing) of drones within State Park boundaries with the exception of campgrounds and sensitive wildlife areas such as avian nesting and roosting sites. I would also recommend consideration of minimum flight height requirements when near persons in the park (with the exception of course during landing). I would think that a minimum of 100 feet above ground level would reduce the sound of the drone being a potential annoyance.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Paul Adamus

adamus7@comcast.net

Public comment:

Dear Legislative Coordinator:

I strongly support rules to prohibit use of drones in or near OPRD lands except where particular lands may be designated as take-off and landing areas, and then only with the approval of a standing committee of federal and state wildlife scientists,. Such a presumption is common among most states that have UAS regulations. Oregon should be no different. The only exceptions that might be considered would be use by governmental law enforcement and fire fighting teams. Commercial uses (not likely on OPRD

lands) should be prohibited unless approved by federal and state wildlife scientists. Researchers from academic institutions or government who wish to use UAS on OPRD lands may be issued a permit only upon the approval of federal and state wildlife scientists. Without such rules the damage to populations of many Oregon wildlife species will be irreparable and OPRD will become the laughing-stock of the nation.

Sincerely,

Paul Adamus Corvallis



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Yehudah (Alan) Winter

Public comment:

To whom it may concern -

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

alanyehudah@gmail.com

I wish to thank the Oregon State Parks Bureau for providing an opportunity to give my in put on this important matter. Our Parks and Beaches are only there because of you and us, because of the laws that protect them after they were set aside from development.

I recommend that all state parks be closed to drone take-off and landings except where they can be safely allowed and where they will not disturb nesting birds as determined by scientific evidence.

Please create an independent, technical working group to determine where they can be allowed that will have the least impact on wildlife, cultural sites and recreation. These decisions can be transferred to maps. Drone use would continue during this process.

Some of the regulations would include

No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal haul out and pupping areas.

Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.

Finally, all areas should be periodically reviewed based on the best science of wildlife usage and other factors that are apt to change over time.

Sincerely,

Yehudah (Alan) Winter



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Tabea Goossen

tabea@charter.net

Public comment:

Cannon Beach is a highly popular tourist destination. I live on the north end of Cannon Beach, which has been overrun with tourists, especially during Covid. The north end is increasing in popularity because it has incredible "secret" beaches and tide pools, and because visitors are not bound by the restrictions of Haystack Rock. As tourism is continually increasing, wildlife populations are decreasing. I see significantly fewer birds and wildlife than I did when I arrived here over 20 years ago.

There has also been an increase of drone users flying drones near the Oregon Islands National Wildlife Refuge rocks at Chapman Point, Crescent Beach, and Ecola Point, both during the day and at night. During the day, I see drones flushing nesting birds, and at night, the colored lights ("eyes") on the drones are simulating predators to these same birds. The increase in drone popularity is resulting in an upsurge in disturbance to nesting birds and wildlife. Puffin populations are in peril and black oystercatchers, a species of concern, are repeatedly being flushed from nests. Wildlife has to contend with natural predators, and adding this load of human caused predation creates an unnecessary burden on wild animals, negatively impacting their survival.

I listened in on the first meeting regarding update of drone regulations. I thought maybe I had the wrong meeting because the policy makers were predominantly drone users. The initial discussion excluded organizations and agencies that should be included, such as US Fish & Wildlife, tribal leadership, and wildlife experts. The scientific expertise from these organizations is valuable and relevant to drone usage best practices.

Please consider closing designated areas to drone usage from May to September during nesting season, including State parks, the Oregon Islands NWF, and any beaches where bird or marine mammals are nesting. Open beach areas away from nesting sites are appropriate areas for flying drones.

It would be beneficial to provide information regarding where drones may take off or land at the beach, and where they may be flown. I understand that State and Federal jurisdiction is different, but it doesn't make sense to have landing and flying information relayed separately. Both agencies should be working together on this initiative. Use of maps, beach signage, and/or a phone app would be helpful to drone owners.

We repeatedly receive feedback from State agencies that enforcement of beach and wildlife laws is

too difficult, and regulations are tailored to ignore accountability for that reason. Not acceptable! Those of us who live at the beach have a ring side seat to the disturbing consequences of that kind of policy making. The State can continue to "look the other way", but our wildlife is paying the price for this lack of culpability.

We want to see drone users flying drones in a manner that is safe and appropriate to all beachgoers and the wildlife.

Thank you for this opportunity to provide public feedback. We appreciate your time spent reviewing our responses.

Tabea Goossen Cannon Beach, OR



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Kenneth Williams

Public comment:

Dear Sir.

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

paperboy20646@yahoo.com

I send this email in support of me and my fellow drone operators, can we please keep the drone laws you currently have and not make the fun sport of flying worse than it is already. I love to fly, I've flown on the beaches of Oregon many times, never had an issue, most responsible drone pilot, recreational or commercial are law abiding drone operators and we only think this earth, everywhere should be free to fly. I cannot speak for all pilots, there are some who are not as responsible as others, but restricting or adding more restricting laws will only make it hard for the honest pilots to fly. Please reconsider and make or keep the current laws on the books the law of the land and let the FAA pursue the pilots that cannot abide by the rules. Please please please keep the current laws the same and not make everything illegal to do. Who likes to be restricted to a few places to fly, there would be an extremely over crowded area and that's no fun, Thank you



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Michael Noack

Rfoxcreek@peak.org

Public comment:

Good Day,

I would like to thank the State Parks for the opportunity to describe my personal experiences regarding drones on state beaches.

With the constant increase of visitors to the coast, comes more and more drones. Unfortunately many drone owners are not responsible users. How does the state regulate their usage? Possible educational outreach? Possibly closing parks and beaches to drone take-off and landings? Where will drones be allowed?

Determining appropriate designated drone take-off and landing areas "should" minimize wildlife, cultural, and recreational impacts. Additionally, a final map of designated take-off and landing locations should be included on the State Parks website. It will be necessary to install closure signage to help with enforcement. Is the State Parks thinking of hiring Beach Rangers to patrol parks and beaches?

Areas approved for drone use should include rules that protect wildlife:

- No drone take-offs or landing to occur within 100m of any observed birds and/or known nesting locations or from seal/sea lion haul out and pupping areas.
- Drone take-off and landings should be discontinued if repeated wildlife disturbance events occur in the same location.

All areas should be periodically reviewed for inclusion or removal as designated drone take-off and landing areas based on the best available science as wildlife usage and other factors can change over time.

The State Parks should include strong enforcement mechanisms in final rules.

Before I close I would like to include one of my personal experiences as I mentioned in my opening sentence. I live in Seal Rock and I've often noticed infractions of beach rules. There is a person who uses a rake to draw mandalas in the low tide wet sand. That wouldn't be such a problem except she dominates the beach, while allowing her dog to run lose chasing birds, bothering other

dogs on leash, and also their owners. Then recently there have been drones photographing her work. The drones have also disturbed birds on the beach and rocks.

Thank you, Michael Noack

Seal Rock, OR



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

David Hutnik

davidhutnik@gmail.com

Public comment:

Too many people are scared of things that they don't understand that's why most posts on this will be please don't allow it because it makes noise or it scares something but most of it's because people don't understand. Again people get rid of things that they don't understand which in turn hurts people who use those tools.

You wouldn't keep people from using binoculars and cameras and state parks and beaches, so drones should be also allowed to fly at state parks.

Only restricts small spaces where it makes sense due to safety to not allow drone to fly otherwise 99.9% of all drone pilots care about their drone and the other people and wildlife around them they just want to capture the view.

The more people prevent drones from flying to less spots there are to fly our state parks and oceans and beaches could have beautiful views from drone perspectives.

So let's give everyone the opportunity to be able to still fly their drone in areas that are safe including state parks and beaches.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Eric Nicolaysen

highresdrone@gmail.com

Public comment:

I am in favor of responsible drone operations including takeoffs and kandings in state parks and on ocean shores. There are many useful cases in which deploying a drone is less invasive, less time spent, faster at accomplishing goals, more cost efficient, and a great opportunity for the average drone user.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Jeanne Raymond raymondj@peak.org

Public comment:

I am opposed to the use of drones in public parks. Drones invade privacy, disturb the peaceful environment that parks, beaches, campgrounds, and trails, provide in Oregon. My husband and I are going to celebrate our 55th wedding anniversary soon at a State Campground. It would be very invasive if a drone hovered over our privacy. We go there to enjoy the peace and quiet.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Tuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Eli Coon elicoon@gmail.com

Public comment:

Thank you for crafting such a fair set of rules. By clearly outlining where take-off and landing is and isn't permitted, you have created a system where laws can flourish. The newly proposed rules do just this and I fully support them.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Walter Major

wmajoriii@gmail.com

Public comment:

Please DO NOT allow the use of drones in Oregon State Parks. Because of their design, they are incredibly intrusive to wildlife and people. The experiences within a state park should not include being inundated with the noisy buzz of drones nor the worry that you are being captured on someone's camera or video. The tech on these devices is also now sophisticated enough that their range is too great to just limit them to certain areas of a park. They will inevitably stray from these areas into the rest of the park. Drones utilized for specific purposes such as research or SAR operations, etc. would be fine of course.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Travis

Public comment:

Been flying FPV drones for few years, got the FAA cert and all. I think the currently proposed rules to allow drone use where safe in state parks is perfectly written. Us drone flyers should be able to enjoy the state parks just like everyone else and from my experience most people want to see the new perspective of the drone too and are very appreciative when you involve them and they get to also experience flying with the operator.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Brenton Unger

brenton.unger@live.com

Public comment:

As an avid lover of nature and drone pilot, capturing all of the beautiful scenery that Oregon has to offer has been so much fun.

Drones are more and more safe these days, quieter, and ensure safe operation even with newer pilots.

I believe the best side effects of drone pilots is that it motivates people to get outside and see all that there is to see.

We pilots capture inspiring footage, post it online and instead of sitting around and being couch bodies, we are advertising a better way of life!

Hopefully we will be able to fly all of the beautiful places! I love Oregon!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Eric Hanscom

eric@iciplaw.com

Public comment:

The Utah state park system has already proven that reasonable drone use can be a useful tool by which state parks can enhance public awareness of the individual beauty of each park at no cost to the park itself. The rules suggested here represent an excellent balance between visitor enjoyment, resource protection, and recreation rights for drone users.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Don Krupicka

dkrupicka@live.com

Public comment:

As a drone pilot, being able to capture beautiful landscapes and geography to share with others is very fulfilling. It allows a person to get a different perspective of beautiful surroundings. I think a reasonable balance between safety, privacy, and wildlife is key in this proposed rule. Please keep the skies open to this wonderful hobby in parks and scenic areas. Again, flying is not necessary in areas such as campgrounds, crowded parking lots, and of course wildlife sensitive areas, but we should be able to enjoy our hobby outside of those areas. Thank you for your consideration.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Paul T. Reed, MSgt USAF Retired

Date comment received:

Tuesday, April 5, 2022

Commenter email (if provided):

masterangler@outlook.com

Public comment:

While I completely understand the need to govern and protect the land and animal inhabitants of all areas not just state parks. I am against banning any use of the parks. The word banning means not allowed at all and that's the part that I disagree with. We all know that no matter what the means or system anyone uses to do anything it can be abused. People drive cars, most safely. There are however many who abuse that by driving recklessly or possibly under the influence of alcohol or drugs. Many people ride ATV's some tearing up any and every trail they can find. Many people own animals and some abuse animals. There are drone operators who abuse the privilege to operate drones. I'm sure you can see where I'm going with this. In each of these scenarios there are people who abide by the rules and do things in a respectful law-abiding manner. It's the norm that people who fly drones as well as possessing a Part 107 License fly their drones in a respectful law-abiding manner. They have worked in most cases long, hard hours to get that license. Their knowledge has been tested to ensure they meet the criteria to fly their drones commercially and many have gotten their license just to be able to show everyone that they understand there are rules to be obeyed even though they don't fly commercially. They fly respectfully bearing in mind the loss of the privilege and or large fines should they break the rules. I'm opposed to banning drone use inside state parks "completely". Banning in my mind is restrictive against all people which isn't necessary or good practice. In this situation it would deprive many people of the beautiful art a drone could provide in the sense of videos and pictures which would be shared thru a variety of different media. "Limiting" drone operation to Part 107 Pilots verses "banning" altogether would certainly be a better option. Allowing these conscientious individuals to fly in a variety of different areas at a variety of different times would be a better alternative. Please consider that when making your decision on whether or not to institute banning drone operattion in state parks.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Ryan Drew 3xtheshooterla@gmail.com

Public comment:

I love the new proposed park rules. As a licensed pilot it sounds safe and reasonable. Let's keep our parks safe and our recreational flyers flying



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of dronesTuesday, April 5, 2022

Commenter name (if provided): Commenter email (if provided):

Jodi Knutson djknuts@gmail.com

Public comment:

Drone take off and landing should occur in a place as far from other park users as practical. Other users with children or animals such as dogs or equestrians can be frightened by the sudden noises associated with Drone take off and landing.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Leonard williams

foodmicronerd@gmail.com

Public comment:

Thank you for the opportunity to comment on this proposed rule. It is an wonderful idea to allow current and future drone operators to fly their drones safely in the parks. As a current owner and operator, I've made it a habit to operate within the scope and regulations of all municipalities and ordinances. I look forward to a favorable decision. Many thanks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Brian Clark

bclark989@gmail.com

Public comment:

I'm a lifelong Oregon resident, an avid outdoorsman, and a Part 107 license holder.

I think the proposed rule changes are a good idea on the coast for areas like Sitka Sedge. It's an appealing place to fly but simply shouldn't be allowed so as to not disturb threatened bird populations.

I think it's important that we do NOT post signs indicating where drones are and aren't allowed to take off. Non-pilot members of the public will feel empowered to confront drone pilots. This distraction is actually a violation on the part of the non-pilot. Signage needs to comply indicate that drone operators need to check before they fly, and that passersby should not attempt to confront or distract pilots.

I also believe this whole program would work much more effectively if areas off limits to drones were added to the B4UFly app from the FAA.

Thanks for your time.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert McDowell

aboveandbelowdroneservices@gmail.com

Public comment:

Hi, I agree that designated areas for landing and take-off of drones is important and wise. Drone used by responsible parties can be of a great value not only to park rangers but city and state as well. With proper and responsible use drones can spot things that may be of great value to the park, rangers and public. One example would be spotting a fire before it is big enough to be spotted on the ground, or promoting the park and it beauty by the drone pilots posting their videos on the internet the potential benefit goes on.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

William Frankhouser

wilzdezign@gmail.com

Public comment:

As many things, within moderation. FAA already provides adequate guidelines for navigating the airspace. It is also duty of drone pilot to be respectful, especially around people and animals. I am in favor to allow drones in the state parks and shoreline to capture the beauty. Along that will always be respectful of people and animals which already exist for things such as bird sanctuary or the FAA rule of flight over people. It does not to be grounding of other type of remote kites, planes, drones in these locations.

Please allow drones to be flown in safe locations as proposed. Not a blanket prohibition.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

jc woodward

jc@Clockery.com

Public comment:

The proposed rule is balanced and reasonable. It does NOT allow drones in wildlife sensitive areas, over people, or in crowded parking lots or other areas.

It DOES allow the public access to public lands for personal enjoyment, which is their right. One group of users doesn't trump the rights of any other group.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Public comment:

Allow drones please.

Date comment received:

Tuesday, April 5, 2022



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Date comment received:

Tuesday, April 5, 2022

Public comment:

Please allow drones. People know the rules.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Mike Schaler

mike@akrondroneservices.com

Public comment:

I'm a commercial drone pilot and also fly for fun and recreation. Reading through the proposed rules it looks like you have a well thought out balanced approach to allowing recreational flyers to enjoy the beautiful parks in Oregon with keeping people and wildlife safe and protected. This proposed rule is one I and I believe many others will voice their support for. Thank you for considering all of the people and the environment that are involved in sharing the Oregon park systems with their friends and family.

Mike



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Joel Starrett

jnstarrett29@yahoo.com

Public comment:

I strongly support more freedom for responsible drone pilots. As more restrictions are put in place, fewer experienced commercial pilots will have a chance at doing what they love, sharing that art, and for many it's not just a hobby. There is very lucrative rapidly growing market for talented drone pilots. Rules should be few, fair and have a strong understandable background that is totally necessary. Drone tech has become extremely reliable and safe. There will always be those that abuse this technology or handle it carelessly. Those people won't follow the rules anyways. There needs to be more attention towards handling this industry and respected professionals should be elected to largely be in charge of helping orchestrate this. The general public should be informed on the important fundamental rules surrounding proper UAS operation so that it becomes common knowledge. Then, if someone pilots a drone they will know they must have things such as remote id and active registrations so that if an accident happens or abuse occurs, the person responsible can be held accountable justly. If we can't even fly in parks then where does it end? If we lose access to filming life and nature, will everyone be held to the same restrictions? Will we have to submit forms and wait for temporary granted access to fly anywhere? Who will manage this process timely? Who will pay for it? Will Film producers, advertisers or corporations be restricted totally equally? Safety can't be the concern considering many other common technologies all around us that are far less safe, especially with RTH, GPS, prop guards and sensors. Disruption of wildlife I hope isn't taken seriously, we're far past that. The main issue I hear anyone having is the potential of privacy invasion. If intentionally harassed, prosecute the perpetrator accordingly. If someone is worried about possibly being a blip on a recording somewhere then they are simply ignorant to the fact that we are all recorded every day almost everywhere we go already, not to mention constantly tracked and mined for data points that are sold to other companies without our consent. With a voice of reason, we must always support the maintenance of freedom and equality. <3



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Willis Reese

willisreeseiii@gmail.com

Public comment:

I believe that this rule is well written and seems to provide for the rights and freedoms of all park users, as well as the natural environment within them. Today, all drone users must, at minimum, participate in an online education program and pass a test in order to use a drone. Therefore, all drone users are aware of the rules and best practices that mitigate the risks involved with drone flight. This rule goes an extra step to bring awareness to drone users to protect the sanctity of the park environment and keep in mind the safety and well being of other park goers and wild life in the area. Overall, this rule is a reasonable one.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Scott Anderson

Public comment:

I think the drone rules as written make a lot of sense. They are a good compromise.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Grandmont

mgrandmont0510@hotmail.com

Public comment:

Great to see that the proposed rules allow drone use where it is safe to do so. It really is time to remove the stigma that for years Hollywood has portrayed all drones as. Virtually all recreational drone pilots are responsible and law-abiding citizens.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Tuesday, April 5, 2022

Commenter name (if provided):

Commenter email (if provided):

Tony Gunter

tonygunter@gmail.com

Public comment:

Public spaces can be a great place for drone activity. I'm a FAA 107 commercial drone pilot. I use my drone and license for my work in the roofing industry. Public spaces allowed for me and those like me to have a safe, open place to fly for practice, skills assessments, and share our technology with others. Don't fix a problem that doesn't exist please.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Corbin Smith

corbinsmith42@gmail.com

Public comment:

This will only help everyone both the drone flyers and the general public know where drones can be operated safely without harm to wildlife. The current rules are unclear this should be passed



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Date comment received:

Monday, April 4, 2022

Commenter name (if provided):

Charles Sampson

Commenter email (if provided):

chuck@portlanddroneracing.com

Public comment:

The authors of the current draft of the rule are to be commended. This rule is well constructed and considers the position of all parties to come to what I believe is an extremely reasonable middle-ground position.

The current rules creates guidelines for UAS operations that protect the interests of other park users, and the parks themselves, while also avoiding legislation that conflicts with the FAAs mandated control of the national airspace. Many other jurisdictions, and the FAA themselves, are running into costly legal disputes due to overreaching regulations that exceed their regulatory authority and fail to address the stated goals of facilitating safe operation for unmanned flights.

As the president of a Portland based drone racing club, I can attest to the fact that the majority of recreational pilots truly want to comply with sensible regulation and operate in a safe and responsible manner.

There is a lot of hysteria in public opinion that paints drones as threats to privacy, wildlife, national security, etc... My experience as a leader within the drone community has shown these to be largely baseless. The fact of the matter is that radio controlled aircraft have been in operation in the national airspace for decades including in many public spaces like state and local parks, with lower impact than most other hobbies.

I believe the current rule, as written, strikes a healthy balance that allows UAV pilots to operate in our amazing state parks, while minimizing the impact on other park users and on the parks and wildlife themselves.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Rachel Stern

rstern1031@gmail.com

Public comment:

Let responsible drone operators fly safely.

Clear of people and wildlife.

Require proper registration of drone and operators and see if there is a civic drone club that would like to teach/ implement responsible drone operations.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Dallas Bell

brghtknght@yahoo.com

Public comment:

Primarily due to a lack of understanding and the human tendency to fear the unfamiliar, recreational drone flying has been greatly over regulated.

Any unbiased risk assessment study would show it is an extremely safe activity and should be afforded every reasonable freedom and deregulation. Of course there will always be people who abuse freedoms, they are the exception and should be dealt with appropriately and on a case by case basis. Simple rule: Endanger people, animals or property and suffer consequences. But please don't condem drone flyers Before they have done Anything wrong....



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Kyle Nordfors

northfalls@gmail.com

Public comment:

While I understand people's concern about drones, I would simply add that drone technology is saving lives. I have personally worked with and developed drone programs in Oregon that are enabling Search and Rescue teams to save more lives. Drone not only cut down the search time to reach the patients, but they also reduce the amount of time rescuers are exposed to the elements. These are amazing tools that are doing great work. Drones save lives.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

glenn mire

glennamire@gmail.com

Public comment:

A public park should be just that, Public. All sorts of activities are allowed, and managed for the public, and drone take-off and landings should also be considered. Designating certain parts of the park for RC and drone activity enables all to benefit from the tax dollars paid to support the parks. Clear rules of flight will help everyone be safe.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

John Rich

john.rich44@yahoo.com

Public comment:

All drone activity is completely incompatible with all historical and current uses of our Oregon State Parks. Drones spoil everything for all human visitors and wildlife inhabitants. The take-off and landing of drones should be completely and permanently banned 24 hours per day, 365 days per year at all state parks, especially at Smith Rock State Park.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Public comment:

Drones are safe just like any other hobby. Boats, cars, wave runners are all more intrusive than any drone. Allow to pursue our photography hobby with drones.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Jeff Miller c3ajeff@gmail.com

Public comment:

Licensed, Responsible Drone pilots aren't the issue. Due to a few bad actors, legislation is being crafted that can produce overreaching regulation - that's not good for anyone. Look into the facts. Don't overreact.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

John Jackley

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

johnj@advancedtechcomm.com

Public comment:

Thank you for the opportunity to comment on the proposed rule, and I would like to urge adoption. My company is based in Portland and we support a wide range of small businesses and entrepreneurs in the state. Our firm is very diverse - we are an ESB; our other senior pilot is the first Navajo woman to earn her 107 certificate; our video producer is Native Hawaiian, our main V/O is a recent U.S. citizen from Guatemala, and our earnings go back into the Oregon economy in the form of rent, office supplies, software, professional services, and more. We have been in the UAS business since 2015 and have grown significantly, with offices today in Panama City, Panama and Accra, Ghana. The proposed rule represents a fair, reasonable, and stakeholder-vetted public process to provide access to Oregon state parks while at the same time respecting the rights of other users as well as the natural environment and species that are part of the parks' ecosphere. While OPRD does not control the airspace over the parks themselves, the opportunity to take off and land in the parks in a regulated manner not only opens up the beauty of the parks to more Oregonians and visitors, but would make a significant boost to our industry's already-robust contributions to the state's economy, The vast majority of Oregon's UAS businesses are sole proprietorships and small businesses, and this proposed rule creates more economic opportunities for the small firms. The task force took on a huge lift and produced a considered and balanced rule that we all can live with and should support. Please add my name and our firm's name to the growing list of supporters. Thank you very much, John Jackley, CEO.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Richard Pawlenty

rickpawl@hotmail.com

Public comment:

As a responsable drone hobbyist I would like to indicate my support of the proposed rules for the safe operation of drones in Oregon state parks. I feel strongly that drones should be allowed where there is no danger, disturbance, or safety hazard to humans and or wildlife. I love the beauty and the history that the Oregon state parks serve to protect and would very much appreciate the opportunity to enjoy the parks with my drone, which provides yet another unique perspective of so many aspects of the parks, that is to say, from above.

I think it's a great idea and I would support that there would be areas in the parks where drones would not be permitted due to safety and disturbance issues and would respect, and encourage my fellow drone hobbyists to respect the proposed rules. Thank you



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

David Fields

fieldsmdavid15@gmail.com

Public comment:

I love the rule as currently listed. I think it's in the best interest of the general public to allow this rule to remain as proposed, where the taking off and landing of drones is allowed everywhere, except where not allowed. There is so much good that can be provided by allowing UAVs to be flown in nature, and changing this wording to limit flights in any way would hurt those who will be law abiding citizens, flying UAVs in a safe and responsible fashion already.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Sara Jordan

losttrailsriders@gmail.com

Public comment:

As a drone and off-road enthusiast (and always respectful on both fronts) I think it would be a shame not to be able to enjoy both hobbies in the beautiful state of Oregon. I think that lawful responsible drone flights should be permitted in and around Oregon parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Ryan Holmboe

ghiakarmann47@gmail.com

Public comment:

I've read about the proposed rule changes for drone, and it does sound like a nicely balanced plan. I spend most of my time in Hawaii (where drones are banned from operation in all state parks) but I was born and raised on the west coast mainland. Thank you for considering fair use of drones in Oregon state parks. Flying drones is my primary hobby, I usually seek out the quieter areas away from people to fly and film natural beauty, it's frustrating to be blocked out entirely from state parks when I know I can fly without disturbing other guests or wildlife. Thanks again!



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Seth Brooks Sethbrooks23@gmail.com

Public comment:

The use of drones should be allowed anywhere that it does not directly affect people or nature. The drug Community has shown to be respectful of others and Wildlife. Further restrictions are Draconian in nature and do not reflect the wishes of society at Large.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Richard Hulkenberg

richard.hulkenberg@icloud.com

Public comment:

The proposed rule is good the way it is written. It allows drone use except where it will cause conflict with people or wildlife. It allows drone use where safe, and will forbid it where they shouldn't be. It is the perfect compromise.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Bianchi

Mark@markbianchi.com

Public comment:

Drones, when operated by professional drone pilots, are safe.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Joseph Sheldon

joesheldon@gmail.com

Public comment:

What's the point of spending billions of dollars on parks if we can't enjoy them? Drones should absolutely be allowed in parks with strict enforcement against those who endanger wildlife or habitats.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

David Glenn

dailydroning@gmail.com

Public comment:

I am an FAA certified 107 commercial operator, FAA TRUST certified, and an FAA Safety Team (FAAST) representative.

I whole heartedly support the proposed rules that would allow safe and responsible utilization of drones in state parks where they can be used safely without interference of wildlife or human activities. I also agree that there are certain locations where they should not be allowed due to possible interference of wildlife or human activities. However, these areas should be as minimal as possible.

In most cases, drones are quieter and less intrusive to humans and wildlife than the mowers, trimmers, vehicles, and other equipment used by the state park staff to maintain the parks themselves and the vehicles and motorcycles the visitors use to visit and traverse through the state parks.

Oregon state parks are beautiful. Drone photography and videography is another way for the people to be able to explore, experience, and share them with the world from a perspective that can't be seen from the ground.

Usage in allowed areas should be subject to FAA regulations.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Rachel Bradford

Public comment:

Look how they are attempting to skew the results!! This is outright cheating!

https://mavicpilots.com/threads/oregon-drone-owners-we-need-your-help-pronto.124297/



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Gregg Socliff

Public comment:

Please strongly consider banning ALL types of drones and drone operations. Especially commercial operations who think they can buy their way in. It is not fair for the general public to have to endure drones with their noise and safety implications. I recently saw two kids who were almost injured by a drone flying quickly through the trees and structures at Silver Falls. it's a miracle they weren't hit and that thing was moving at least 40mph and sounded like a flying razor blade. The other huge issue is privacy. All of these drones have cameras, and I don't want them recording my family or I or anyone else for that matter. And finally, drones scare and disrupt wildlife. We can't allow that. Please nip this in the bud. Thank you.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob Taylor

fullbookcases@yahoo.com

Public comment:

I support the use of drones. I find the beautiful photos that people post from their drone on social media encourages more people to visit the area and enjoy the area. It definitely helps the economy of the local area.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Zach Sharp

zacharyesharp@gmail.com

Public comment:

The vast majority of drone pilots are responsible, safe operators. Basic rules about not disturbing wildlife or people make complete sense but overregulation does not. Require permanently applied operator/drone IDs on the drone, make some basic safety / quality rules around not disturbing wildlife. Perhaps designated drone take off/ landing zones at certain parks or trailheads would benefit everyone.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Kyle Getchell

kylegetchell@gmail.com

Public comment:

I think the proposed rules are great middle ground for both sides. Provides the ability for drone users to use drones in a safe manner while still protecting the safety and privacy of the public.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Brandi Peace

bapeace@nwosu.edu

Public comment:

These are very well written rules that are clear and concise. I can't wait to visit your state parks!



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Paul Nowotny sinbad39@aol.com

Public comment:

I'm all for responsible operations of drones. Maintain an altitude that doesn't disturb people or wildlife and follow federal regulations.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Public comment:

Pro drone, let them fly!

Date comment received:

Monday, April 4, 2022



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Bob J

psunittany42@yahoo.com

Public comment:

I like these proposed rules. I like the focus of allowing the use of drones where it would be safe, and restricting the usage where not safe.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Roy Alabran

royalabran@hotmail.com

Public comment:

I am in favor sharing public park space and of the safe use of recreational drone use in Oregon public parks where there use does not infringe on the safety of the public or disturb wild life.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

rashawn woodgett

Public comment:

hello

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

rashawnwoodgett@gmail.com

Taking off and landing of drones should be allowed by FAA certified pilots. The certification does not absolutely guarantee responsible use of drone but will have some educated accountability. Understanding the concern for the non pilot and the worry about peaceful enjoyment of the surroundings will be managed by respect from pilots who have taken the extra step of responsibility. please consider.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Rocco Germani

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

randrserver1@gmail.com

Public comment:

Please allow take off and landing of drones in Oregon Parks!



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Ian Goldspink

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

beachboy7132@hotmail.com

Public comment:

There is so much room on the beach for everyone to get along



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

David Clymore

dpclymore@msn.com

Public comment:

As long as it's safe and is not bothering animals or other people I am for flying in state parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Joe Fazioli

joseph.fazioli@gmail.com

Public comment:

With the prevalence of drones in both recreational and commercial use, it's important to have common-sense rules like this proposal. It provides an avenue for drone operators to operate in safe, unobtrusive ways, protecting both our rights and those of the general public, as well as safeguarding sensitive wildlife.

Restricting the ability to fly drones is a slippery slope to other onerous regulation of activities that SOMEONE doesn't like. Soon, parks could ban hunting, fishing, or cycling.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

John Bragg

john@warder.co

Public comment:

Drones are a legitimate use of airspace. In fact, only the FAA can regulate airspace, so any rules being considered must stop above the ground - an unfair law in TX was just struck down for this reason. Responsible pilots follow the rules of using the airspace, and safely operate their equipment, keeping people, animals, and nature safe. The rules as stated are a fair compromise - drone pilots will be directed to safely land and take off in a designated safe takeoff area. They will be required to follow the rules of the air, as anywhere else, in parks. It is the right of each citizen to enjoy these taxpayer-funded parks as they see fit, barring unsafe behavior. Since the proposal as stated is exactly a plan for that safe use, more limitation would be infringing upon the rights of responsible, law-abiding citizens (and of note: it will not affect the non-law-abiding ones in any way).



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

JOHN LITTLEFIELD

JREALGUY2@YAHOO.COM

Public comment:

Should be allowed if done responsibly and safely to include consideration to wildlife and public.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Larry Cummings

Imcummings99@gmail.com

Public comment:

I am an avid photographer and videographer and much of what I get imagery from are my drones. State Parks and beaches are some of my favorite areas to film since there is so much beauty in them. Responsible drone pilots (which I feel most are) would not pose a threat to wildlife nor the environment and removing the ability for them to take off or land in State Parks or beaches would close many to the ability to share their experiences to others through their imagery. Please keep State Parks and beaches accessible to drone operations so that people can share the beauty that Oregon State has.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Glenn Johnson

glenn@gjtt.com

Public comment:

As a professional and recreational drone operator, i would like you to allow drones where possible. Oregon has a lot of beauty that can be enjoyed by everyone, and although I live in Ohio, I visit Oregon often for hiking and photography.

Thanks for your support!



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Brad Bigham

brad@bradsdronestx.com

Public comment:

Hello, my name is Brad. I've been in the drone business for several years, in both the public and private sector. The proposed rules allowing safe launch/landing of drones in state parks is a great balanced approach without outright banning drone use. Thank you for proposing a balanced rule, and I support the rule. Working with hobbyist and professional drone operators to find common ground is fantastic. I hope those passes and other entities across the country can take the same approach where necessary.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Mark Dahmke

mark@dahmke.com

Public comment:

Thank you for proposing a balanced well thought out rule allowing recreational drone use in state parks. I support the proposed rule and hope it becomes a model for other states.

FAA Part 107 Pilot



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Terrill Jarvis terrill@eucomputers.net

Public comment:

I am an Oregon resident, and a licensed FAA drone operator. I fully support allowing drones to take off and land,bcc and use the airspace in and around state parks as long as the wildlife, humans, and habitat are not disturbed.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

WD Schwartz

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

backdraft999@yahoo.com

Public comment:

Drones are a fantastic and fun recreation that should be allowed in public places.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Adam Jagunich

MNaerosmithfan@yahoo.com

Public comment:

To whom it may concern,

Hello! I would like to take minute to let you know how much I appreciate you taking time to make new drone laws. I also will say that I am in favor of the laws as they are being drawn up. I understand that the state of Oregon has some majestic Natural Resources. Saying that, drones and their pilots should be allowed to operate in areas wherever it is safe. These laws can only protect those resources and the people that come to see them for many years to come. Thank you very much for your time.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Ryan Stotsky

Ryan@0to400droneservices.com

Public comment:

Yes Part 107 holders and hobbiests should be allowed to take off and land as freely as anyone who say wants to ride a bike in the park. We drone pilots already have a ton of rules and regulations to follow and the vast majority do. The few 0.05% who don't wouldn't follow any new proposed regulations anyway. So how is limiting the access for the 99.95% fair. If it's public use land then everyone from bikers, hikers, campers, and drone pilots all get to use the land just the same.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

John Keller

Public comment:

This bill appears to be a reasonable compromise for both the drone-flying community and the general public. Overly restrictive "home-grown" regulations do not benefit anyone and prevent the fair usage of the federally-controlled airspace as intended by the Federal Aviation Administration. The reckless piloting of drones with no regard to anyone or anything is anathema to legally licensed and/or certificated pilots, but restricting some activities in locations that would disturb wildlife or have other ecological impact is, again, reasonable.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Public comment:

This seems like an intelligent approach to managing drone activities. It uses common sense and restricts drone use only where it will actually interfere with wildlife and visitors. This should help promote responsible drone operations, while still protecting parks.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

David Ziegler

david@ziegler.us

Public comment:

As a commercial UAS pilot, private pilot, instructor, aviation advocate, and enthusiast, I implore you not to unduly restrict UAS usage. UAS pilots and operations contribute greatly to public safety, wildlife management, research, development, education, and more. Unfortunately, we see more and more increased local and state restrictions that are strangling the industry. The FAA is aware of how important allowing UAS operations in our airspace and has invested heavily in making sure recreational and commercial (Part 107) pilots are aware of how perform safe operations without damaging property or interfering with wildlife. Please join them in fostering and supporting such an important industry.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Jamie Patterson

jamie@bfsolutions.net

Public comment:

I would like to say that I am all for the take-off snd landing of Drones. I like the way the proposed rules allow drone use where safe, and forbid drones where the shouldn't be! Please allow us safe and responsible drone pilots to be able to fly and enjoy. Thank you



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

william neylon

bill.neylon@gmail.com

Public comment:

I think the rule thats proposed that allows for one to use a drone as long as it dont interfere with people or wildlife is a good rule.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Jeff Wickham

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

jeffwickham@yahoo.com

Public comment:

Congratulations this is the most logical of any I've seen.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Chris Sganga

chsganga@yahoo.com

Public comment:

Drone enthusiast should be able to enjoy their hobby, in state parks as long as they don't impact wildlife. Banning drones it's unfair to a lot of Americans that enjoy the hobby. FAA regulates the airspace, Public lands are there for everyone to enjoy.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Date comment received:

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Darren Lee

dlee3782@comcast.net

Public comment:

Drones, while fun for the hobbyist -- providing unique views and experiences -- and commercial operator alike, come with inherent risks and regulatory ambiguities that make it necessary to control their access to fragile natural areas more rigorously than your average suburban park.

It is well settled that states can only control where drones can take off and land, so this aforementioned control of access should be limited by creating take off and landing areas that would not allow drones easy access to beaches or areas with wildlife. Drones must be operate within the pilot's line of sight (LOS), typically around 1,000' for a small consumer-grade drone. Putting all of these things together, if drone take off and landing areas were located so that they were not within 1,000' of beaches or other sensitive areas that would -- in theory -- be a reasonable accommodation of the needs of sensitive areas and the desires of drone pilots to engage in their chosen hobby.

However, a simple search of YouTube would reveal dozens of videos demonstrating that drone pilots do not abide by these rules. This one is a perfect example of a drone pilot not only endangering wildlife, but also flying beyond LOS, and flying over people (another activity that is prohibited without certain safety mitigation factors in place): https://www.youtube.com/watch?v=XLca9wtVaDY I encourage you to look at the video evidence on YouTube and decide for yourself if drone operators -- in all innocence -- can be counted on to act responsibly and by the rules. Personally, I urge you to limit take off and landing areas for drones to places where they cannot technically reach sensitive areas or fly over crowded areas. Say, not within a mile of said areas.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Scott Brinkerhoff

scott.brinkerhoff1@outlook.com

Public comment:

As an avid FAA certified drone pilot, I understand and respect the importance of safety for myself, those around me and protected wildlife. I appreciate that the Oregon government is working to protect not only the people and wildlife, but the enjoyment found in flying drones and the beauty that can be shared through aerial imagery when done safely.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

James Anderson

jander42@hotmail.com

Public comment:

It is tempting to try and use rules to control human behavior but unless there is a pressing need to protect wildlife (based on science) please don't add yet another ban to how people are able to enjoy and study nature. Technology has more applications than any rules can anticipate and the loud noisy drones of today can evolve faster than government rules. I don't fly drones but part of the price of living in a free country is being tolerant of other people enjoying themselves even if we find it annoying.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Scott Randall

srandall25@yahoo.com

Public comment:

I agree with the proposal as written to allow the operation of drones where it can be accomplished safely. I believe communities, cities, and states, are much better off with policies, city ordinances, rules, and regulations that support safe drone operations versus no support at all for drone operations. Recognizing that drones are here to stay and an integral tool to serve many industries and businesses, it's very important that when implementing state and city level ordinances, that we also recognize the overall governing authority of the Federal Aviation Administration when it comes to the airspace. Thank you for supporting the UAV industry.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Lei Scheidell

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

thedronegal@leischeidell.com

Public comment:

Drones can serve so many good purposes like search and rescue for instance. It makes it nearly impossible for a drone pilot to assist if they cannot take off or land within the park areas. I realize people find them annoying and we need not bother wildlife but most who are flying drones for a working purpose have no desire to chase wildlife with a drone. Look to the good which can come from the use of drone. Forest management can be aided with use the of drones too. Please I respectfully request consideration for altering the language to at least allow for take off and landing of drone for commercial uses for those who are FAA Part 107 licensed.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Jared McArthur

jared.mcarthur@gmail.com

Public comment:

Take offs and landings should be allowed in State Parks where then is a safe amount of space. Flights can be made at varied altitudes that won't disturb visitors or wildlife.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Erik Halberstadt fire@duck.com

Public comment:

There have been many decades of unmanned aerial vehicles operating safely in the public airspace. And although the drones as they're called often multirotor aircraft are fairly recent, the safety record for that has been exemplary when it comes to public operations. Please allow the public to public spaces were safe to do so.



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Robert Bogan

robo329@aol.com

Public comment:

It's actually very nicely written. It allows drone except where it will cause conflict with people or wildlife.

I like the way the proposed rules allow drone use where safe, and will forbid drones where they shouldn't be, and how customized that can be per location.



Oregon Parks and Recreation Department

Proposed rule change: Date comment received:

Take-off and landing of drones Monday, April 4, 2022

Commenter name (if provided): Commenter email (if provided):

Ramon Aguirre Ramon@AguirreTech.com

Public comment:

With clear language there can be room for both Drone users and people and wildlife. Designated areas for take off/landing and minimum heights to offset the potential distraction to other users allow all interested parties to enjoy the beauty of the lands.



Oregon Parks and Recreation Department

Proposed rule change:

Take-off and landing of drones

Commenter name (if provided):

Shane Williams

Date comment received:

Monday, April 4, 2022

Commenter email (if provided):

shgooseman@yahoo.com

Public comment:

I like the way the proposed rules allow drone use where safe, and will forbid drones where they shouldn't be. This makes common sense and allows all to be safe while enjoying their hobby and recreational activities



Oregon Parks and Recreation Department

Proposed rule change:

Date comment received:

Take-off and landing of drones

Monday, April 4, 2022

Commenter name (if provided):

Commenter email (if provided):

Steve Sagnotti

stevesag@gmail.com

Public comment:

I am a native Oregonian and love our state parks. I am also an FAA certified remote pilot.

Many of the comments I've read regarding the take off and landing of drones in parks talk about disturbing of wildlife. This disturbance is real, but not limited to drones; People, dogs, horses, bicycles, etc. disturb wildlife. Should we lock up parks from all of theses things? I think parks are for the enjoyment of nature's beauty and want to fly my drone in/over the parks to capture some of this beauty from the air.

As with most activities involving people there are good actors and bad actors. Those that will follow the rules and those that will break them. I would hope that park drone rules will acknowledge that and take appropriate considerations to address and differentiate these.

I would limit drones in parks to properly credentialed (part 107 or TRUST) remote pilots. Pilots should probably stop at the park office to notify park officials of intent to fly and have their FAA numbers logged. I would also expect unlicensed pilots to be severely dealt with when caught flying in a park without prior notification or credentials.

I also know that there are times and places that should be off-limits, such as nesting and breeding times for birds, especially the sea stacks off shore. But outside of those times drones should be allowed. That would mean plenty of signage about these times and locations, and once again severe penalties for violation.

The FAA already has great guidelines for flying over people that would apply to parks and campgrounds; the FAA related people on your panel should be aware of these and provide good guidance.

Another thought is timing. As a photographer and drone pilot I want to take my images in the best light this is most common in early morning or late afternoon. My rule of thumb is I stop taking morning pictures by 10am and don't start again until 4pm or later; there are some seasonal considerations, but this is a good rule of thumb. Having a 6 hour no fly time during the middle of the day in parks would not be a great trade-off for me, I also presume this is the time of day that is busiest for most parks and produce the most conflict. Along this same line it might be acceptable to have no flying on holidays and weekends in more popular parks or park areas.

Bottom line drone flying in parks by responsible pilots should not be ruled out. Drones are a legitimate use of park space and as with many other uses of our parks there needs to be some accommodations for responsible drone operators to enjoy their hobby and profession. The park's drone rules should not be an all or nothing or one size fits all approach. As outlined above there are many ways to provide drone users time and access to our parks.

Respectfully, Steve Sagnotti