Introduction

Harney Basin Wetlands Collaborative (HBWC) partners have prepared written comments to address the concerns in their OWEB FIP Application Evaluation. The Integrated Wetlands Management in Harney Closed Lakes Basin submitted by the Harney Basin Wetlands Collaborative was developed by a collaborative that has been working together since 2011. The projects presented by the collaborative in the FIP application are a result of collaboration, learning, adapting and a look to the future.

Closed Lakes Basin wetland habitats is one of the seven ecological priorities of OWEB FIP, and in that priority statement OWEB points to the "unique chain of desert oases that, as an integrated network, provide critical habitat and food for waterbirds throughout the seasonal cycle" and that "the region also fosters an historic and vitally important ranching community and associated economy that depends on the ecological health of these wetland habitats. In addition, Malheur National Wildlife Refuge and other wildlife areas in the Closed Lakes Basin are critical recreational and economic resources for these rural counties.

The Harney Basin supports abundant bird populations and a thriving agricultural economy. The Harney Basin Wetlands Collaborative is working together to maintain an abundant, diverse, and resilient wetland ecosystem in the face of climatic and anthropomorphic influences to enable a strong natural resource-based economy capable of meeting ecological, community, and economic needs.

Concerns From OWEB Grant Review Team Evaluation

1) The application lacks description and analysis of the historic trajectory of this closed system and whether the initiative can offset future systemic changes caused by long-term precipitation patterns. Malheur Lake was significantly altered by ice and flooding in the 1980's, which caused the lake to lose its submerged and emergent vegetation and also allow carp access to the lake. This all transformed the lake into a turbid, shallow water body with reduced bird use. It is unclear whether ecological benefits achieved by the initiative are sustainable over the long-term given the likelihood of future systemic changes. Responses from Casie Smith- USGS and Jess Wenick

While past years can act as analogs for future years, climate variability in the Harney Basin is ongoing. For example, two drought years (2021 and 2022) and then a wet water year (2023) created some of the best

Malheur Lake habitat and water-quality conditions seen in decades. In 2023, Malheur Lake had clear water, submergent and emergent vegetation, and an extremely high abundance of birds. Resource managers can't change how wet or dry a water year is, they can decide how and where water is used.

Common carp have been present in Malheur Lake since the 1950s. 1960s and 1970s photos show that established emergent vegetation continues in the presence of carp. The 1980s flood destroyed these stands. Since Malheur Lake is a shallow wetland, drought cycles allow opportunities for the recovery of emergent vegetation. When coupled with efforts to greatly reduce carp populations, similar recoveries may be expected if this were to occur again. Until then, the expanding emergent marsh, which can be further stimulated by our proposed actions, helps retard wave action and other factors that stir sediment. Concurrently, the electric carp barrier and the promising potential of YY Carp technology may very well result in effective carp control and a dynamic, functioning wetland.

The best way to make lake habitats and communities resilient to climate variability is to make informed water management decisions. The projects in this FIP proposal will give resource managers the information they need to make informed decisions, and the Harney Basin will be better able to adapt in the face of a changing climate.

2) Partnership engagement with the landowner community to facilitate and support restoration is not well described in the application. The overly general description of engagement lacks details describing how engagement will be done. The application also did not describe how prior engagement led to successful restoration to date. It is unclear whether there are unreached landowners from the previous FIP initiative, and if this proposal seeks to fund projects in partnership with these landowners. Responses from Tony Svejcar- Wet Meadow Partners, Greg Green - Ducks Unlimited

There is demonstrated success within the HBWC with members partnering and sharing resources, in order to achieve its SAP goals and successfully complete projects. There are numerous examples where members are working together with landowners on individual actions.

There has been a history of engagement with landowners that participate in HBWC, this includes meetings, presentations, workshops and field tours. During the previous FIP there were landowner workshops (2018, 2019, and 2023) and field tours (two in 2023). The same landowners have stayed engaged with the collaborative over the years. The workshop and tour approach we used was to send landowners information and then use the time together to ask landowners for comments on the material or to share their experience. For example, landowners reviewed several versions of the flood meadow state-and-transition model developed during the first FIP. Over the course of the first FIP there were numerous radio interviews and newspaper articles that paired scientists and landowners to discuss flood meadow topics. This media coverage provided exposure to HBWC to a broad group of community members. The second FIP will also bring in new participants such as the High School Biology Club and young ranchers who were not specifically targeted in the initial FIP. As we go forward with workshops and field tours, the newly targeted groups (high school students and young ranchers) will be invited to participate.

Additionally, the Harney and the HCWC has conducted landowner engagement and outreach to identify projects, Ducks Unlimited (DU) provided technical support for project scoping, design, permitting, and implementation on those projects. With HDP providing overall grant management and oversight, as well as further community outreach through media outlets and websites. Members, such as DU, are leveraging OWEB's FIP investment to bring additional federal funding (NAWCA) to support project implementation.

3) While it is clear that the partnership has shown success over the years, the application lacked details describing how and why the partnership has been successful. For example, it is unclear if there are formal approaches for how the partnership deals with succession planning in terms of partner staff and board turnover and engaging new members of the partnership, or if this is accomplished more informally. Response from Brenda Smith - High Desert Partnership

High Desert Partnership is a nonprofit organization that has been operating in Harney County since 2007. Originally formed to help ease tensions and poor relationships across land management boundaries (75% of land in Harney Co. is managed publicly) our founding board members built relationships at kitchen tables across the county cup of coffee by cup of coffee. We have been successful by bringing diverse partners together to work together on the complex issues presented in Harney County. High Desert Partnership convenes six different collaborative initiatives and we support each of these groups including Harney Basin Wetlands collaborative through coordinating, providing grant administration, contracting professional neutral third party facilitation and technical assistance to help these diverse groups accomplish the

decisions made through consensus. Each collaborative group develops and approves operating principles that suit their group. High Desert Partnership holds the historical knowledge of the group and has capacity to bring new partners into the collaborative and essentially are the link for succession in partners, so this occurs more informally. High Desert Partnership has developed a website that holds the history and accomplishments of the Harney Basin Wetlands Collaborative which recently came online.

The Harney Basin Wetlands Collaborative has been working together for 13 years, and has maintained participation members from a wide background include Malheur National Wildlife Refuge, Ducks Unlimited Natural Resources Conservation Service,USGS, Bird Alliance of Oregon (formally Portland Audubon), Wet Meadow Partners, Harney Soil and Water Conservation District, County Court, Friends of Malheur NWR, Intermountain West Joint Venture, Harney County Watershed Council, Eastern Oregon Ag Research Center, Bird Conservation Oregon, Burns-Paiute Tribe and landowners.

4) It is sometimes unclear whether the High Desert Partnership or the Harney Basin Collaborative partnership will be responsible for specific actions. Response from Brenda Smith - High Desert Partnership

HBWC operates as a collaborative made up by partners with a shared commitment to HBWC's goals and its collaborative approach to implementation of the collaboratively developed strategic action plan. HDP serves as the neutral convener for the collaborative. Partners include private landowners; federal, state, and local government agencies; the Burns Paiute Tribe; conservation organizations; and other individuals with a demonstrated interest in the long-term health of the Harney Basin's wetlands. Other partners contribute time, expertise, funding, and other resources in support of the partnership's efforts.

Since the Harney Basin Wetlands Collaborative partners have been working together, High Desert Partnership staff have worked to provide capacity to keep projects on track if partners capacity becomes limited. For example, in our first FIP the MNWR was taken over by militia extremists. MNWR staff did not know when they would be able to return to the refuge. HDP was able to initiate the projects that were seasonal in nature and kept from losing a year in project implementation. HDP also coordinates communications and outreach for each collaborative we convene - multiple partners engage in communications and HDP works with partners to coordinate communications. This is a true partnership with a diverse group of partners.

5) The Burns Paiute Tribe is listed as a core partner; however, their role in the initiative is unclear and they are not included on the signatory page. Comments Provide By Brenda Smith- High Desert Partnership, Jess Wenick

The Burns Paiute Tribe has a strong shared interest in the ecological health of Malheur Lake. Malheur NWR and Burns Paiute Tribe are completing a Memorandum of Agreement which includes quarterly meetings to review Refuge activities and plans. This MOA encourages the Tribe's direct involvement in Refuge projects, which would include any FIP activities occurring on the refuge.

High Desert Partnership works to bring needed capacity to the Tribe to be able to engage in more collaborative opportunities This is a very small Tribe with around 200 members living in the community. A number of our partners engage with the Tribe. The Bird Alliance of Oregon (formerly Portland Audubon)and the Friends of Malheur Refuge, HDP partners regularly have tribal youth events at Malheur NWR. Bird Alliance of Oregon also works with the Tribe on other Natural Resource projects and consults with the Tribe when working on new projects (such as the Reed Canarygrass project) to ensure their perspective on deliverables are represented.

6)The metrics relative to bird populations are not described in the application making it unclear whether a scientific approach will be applied to this work. Response from Teresa Wicks - Bird Alliance of Oregon

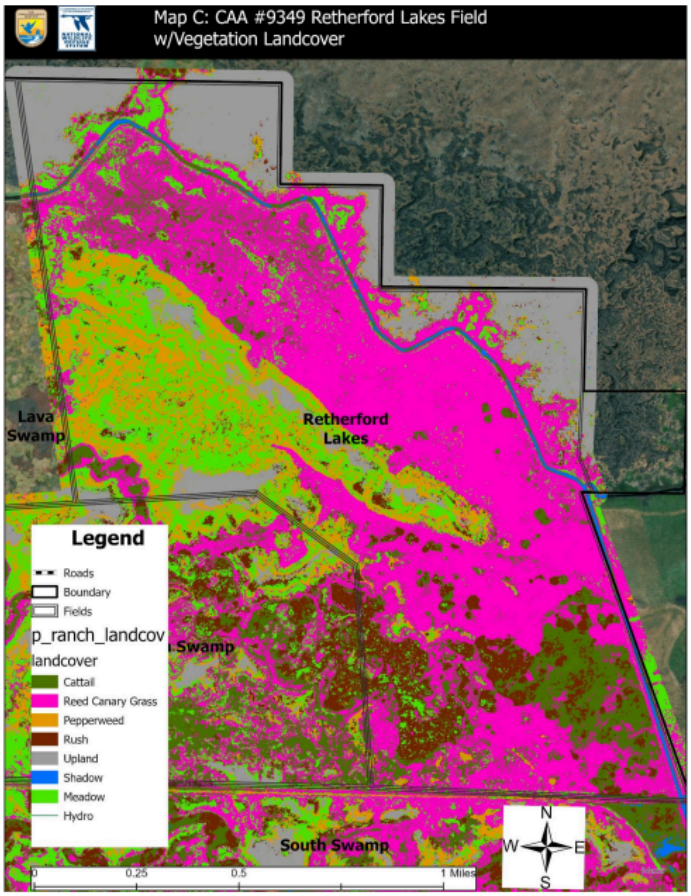
Through the first FIP, Bird Alliance of Oregon was able to work with multiple partners to begin the expansion of bird monitoring, including utilizing Community Science, to cover more of the landbase of the Harney Basin. This scientific approach includes the Area Count protocol established by eBird for inventorying and monitoring birds in the Silvies Floodplain and their response to infrastructure projects. This also includes projects using passive monitoring, with a protocol modified from the Bioacoustics Unit at Alberta Biodiversity Monitoring Institute and protocols used for monitoring land and waterbirds at MNWR. To date, we've been able to expand bird monitoring, and now research, from the southern end of MNWR to a large area of the Buena Vista Region, to Tern Island on Malheur Lake, to the playas of the Double O region, and through the Silvies Floodplain (largely in the region SE of Burns). These efforts would not only continue under a second FIP, but would be expanded in strategic ways with other partners. In the first FIP there were no metrics set for bird populations, aside from creating habitat that would support more waterfowl during migration. The metric that Bird Alliance of Oregon is using to understand the success of our work including presence/absence, relative abundance, species richness, and bird community composition (specifically

identified as important by Burns Paiute Tribe Natural Resources staff). Regarding metrics like trend data or other more specific metrics, we would generally want to see positive or stable trends, however the context of these trends are particularly important. For example, an increase of shorebirds using Malheur Lake in 2022, while impressive, isn't necessarily an indicator of positive changes in habitat quality. In the fall of 2022 there was a shortage of saline lake and other aquatic habitat for migrating shorebirds throughout the region and the larger flyway. Thus, the increase we saw could very well be associated with the lack of habitat elsewhere. Therefore, future work will always need to take into account the availability of habitat throughout the region combined with metrics around habitat quality that we are working with partners to establish (i.e. based on apparent nest success can we create metrics around "high quality" vs "poor quality" meadow conditions) when looking at bird population trends. Essentially more birds using an area is not always an indicator of good habitat. Sometimes it is an indicator of poor habitat availability across the landscape.

7) It is unclear the extent to which information learned in the previous initiative informs the current initiative and whether the Strategic Action Plan needs to be updated to reflect lessons learned. Responses from Brenda Smith- High Desert Partnership, Tony Svejcar - Wet Meadow Partners, Samuel Artaiz-Harney Soil and Water Conservation District

During the HBWC first FIP the flood meadows of the Harney Basin were mapped, which gave a first cut at identifying invasive species in a spatially explicit manner. With legislative funds allocated to Harney County we are in the process of contracting with a firm that has extensive experience with high-resolution mapping.

Funds are available to map Harney Basin wetlands in private ownership. Currently the Malheur National Wildlife Refuge (MNWR) has completed the same mapping process and the results have been impressive. MNWR is basing their invasive species program on the results of the mapping tool. The ability to use the same mapping tool on both public and private land is of great benefit to the overall management of the Harney Basin wetlands. Invasive species management in particular will benefit from identification of problem areas. Other vegetation management strategies revolve around manipulating water management, various non-traditional cutting times, and virtual fencing to allow targeted livestock grazing to favor species other than reed canarygrass.



Harney SWCD and partners have continued their work on securing funds for technical assistance, design and permitting to create an inventory of shovel ready wet meadow projects in Harney County including the restoration projects within the current FIP application. Since applying for the FIP in Sept 2023, eight restoration projects have been funded for 100% design and permit costs through the Harney Basin Wetland Collaborative through legislative funds awarded to the High Desert Partnership. Restoration projects within the FIP include Smith Brother Floodplain Infrastructure, Soldier Creek Wet Meadow Infrastructure, Riggs Water Control Structure and Cow Creek Floodplain Restoration. In addition, four other wet meadow projects in Harney County in and outside the FIP boundary have been awarded funds to be 100% shovel ready. Approving this FIP application would greatly increase this momentum of the wave Harney Basin Wetland Collaborative has created in the last few years as it pertains to wet meadow restoration on private lands.

HBWC Strategic Action Plan has been through two recent revisions, which the whole collaborative leaned in to provide these revisions. High Desert Partnership has recently cataloged all of the information that the collaborative has learned over the years into an active website that is specific for the HBWC. This website houses the new SAP, papers, presentations, maps, images and meeting notes.

8) More recent information on carp would have been helpful to understand how progress toward carp management will be tracked. **Response from Jess Wenick**

In Fall 2022 MNWR had the lowest carp population in recent history due to drought and a large electro-shocking effort. It was determined that the Blitzen and Malheur Lake carp population was reduced to a few hundred individuals. Tracking carp management success over time is difficult because their population shrinks and expands according to the size of Malheur Lake. Our biologists have determined that the best way to manage the population in the long-term is to remove access to the refugia they seek in the lower Blitzen River when Malheur Lake is undergoing a drought cycle (as in 2022). The Collaborative has discovered that both individual carp and population fitness is reduced when they are denied access to the River. The recent carp reduction effort bears strong testimony that these population decreases can and have resulted in water clarity and phenomenal vegetation growth when Malheur Lake expands post-drought.

9)The initiative methods to track progress are not clearly described, including incorporation of scientific data on bird populations. **Response from Teresa Wicks- Bird Alliance of Oregon**

Because baseline avian data that is less than ten years old does not exist across much of MNWR (and doesn't exist at all for most of the basin) one of our biggest efforts has been to establish baseline data before on-the-ground projects occur. Another goal has been to find methods for monitoring, studying, etc. bird populations that make a large scale effort more feasible. Some of the methods for tracking progress include baseline data to help minimize negative impacts to birds using wetlands of the Harney Basin for stopover or breeding habitat, monitoring bird use of areas treated under various HBWC projects to measure bird response to said treatments, and working to strategically select wetlands for preserving/rehabilitating. The combination of radio tagging and MOTUS tagging projects, passive acoustic monitoring, on-the-ground data collection, and modeling have us well-positioned to not only predict areas that will provide the most ecological benefit for projects, but methods to track/validate our predictions. Additionally, outside of FIP funding, we have been talking with leaders of other landscape level monitoring projects to understand how we can partner with private landowners in a way that empowers them to collect data (e.g., through passive

acoustic monitoring and/or through landowner community science efforts). This data would largely be used to understand bird presence/absence, relative abundance, species richness, and community composition. We are also working to establish a Breeding Bird Index that could be used to understand specific interactions between birds and habitat and measure nest attempts/success in a less invasive manner.

10) It is unclear how the US Fish and Wildlife Service is engaged in the initiative and whether their priorities are incorporated into restoration strategies. The Malheur National Wildlife Refuge is a major landowner in the initiative geography. **Response from Jess Wenick**

Malheur NWR is an active partner in the Harney Basin Wetlands Collaborative. Refuge staff is actively involved with collaborative partners in data collection, and analysis for basin-wide water/vegetation management and rehabilitation projects. Malheur Lake-related projects were brought forward by Refuge staff, and all projects are supported by Refuge leadership. Our priorities are incorporated into restoration strategies because we were at the table assisting in their development.

11) It is unclear how the priority areas determined from the wetland and ecohydrological modeling efforts (resulting in the Watershed Synthesis Model) will be integrated with the other metrics, such as the bird surveys. **Responses from Casie Smith- USGS, Teresa Wicks - Bird Alliance of Oregon**

Historic management of MNWR has focused on maintaining the habitats of Malheur, particularly wet meadows and impoundments, at a relatively stable state. That is, even in drought conditions, many fields receive water. This strategy of management was designed to primarily support waterfowl and Sandhill Cranes. The unintentional consequence of maintaining a dynamic system in a relatively stable state has been the spread of invasive grasses and potentially an alteration in how birds and bird communities are distributed across the landscape. Additionally, the channelization of the river has created a disconnection from the floodplain along miles of the Blitzen River. Because of this there are areas where the woody riparian vegetation is either in poor condition or does not exist. Efforts to not only understand the current distribution of birds across the landscape, but to understand that relationship to water management and vegetation will provide restoration efforts that are better informed and more likely to produce positive benefits to the most bird species. This potentially means creating a more dynamic system and/or working to reestablish connection between the river and the floodplain. Efforts such as the Watershed Synthesis Model may help with highlighting the best areas for successful restoration with the maximum benefit to diverse bird species.

The Watershed Synthesis Model will show the quantity of habitat types (including wetlands/impoundments, riverine, irrigated wet meadows, and lake) that were created each month of the irrigation seasons during 2022, 2023, and 2024. This model will inform other monitoring aspects proposed in the FIP and will be strengthened by ongoing efforts including bird and aquatic vegetation surveys. For example, the timing and duration of inundation of the irrigated wet meadows may affect the spread of invasive plant species. The Watershed Synthesis Model will inform irrigated wet meadow managers of previous timing and duration of inundation during the past 3 water years. The results of the synthesis model, in conjunction with bird and aquatic vegetation surveys, will allow resource managers to prioritize habitat types based on the available water to achieve ecosystem benefit.

12) While the High Desert Partnership is playing a coordination role in the initiative, the roles of this organization and the contracted facilitator are not clearly described. Responses from Brenda Smith, Melissa Petschauer - High Desert Partnership

Continuing efforts to restore and maintain the habitats in the Harney Basin under climate change is critical for the support of migratory and breeding birds in the Harney Basin. Making changes to a landscape that has been modified over 150 years is a long-term effort. The maintenance of partnerships and coordination of information and restoration activities to address priorities requires HDP staff and facilitation to maintain progress. HDP serves as the neutral convener and fiscal agent for HBWC, contracts for facilitation of the collaborative process, and employs staff and contractors needed to advance the collective work of HBWC.

Neutral facilitation is necessary because we bring together groups who may disagree on priorities, and to progress in consensus decisions a neutral facilitator allows partners to discuss disagreements in a constructive manner and ensures all voices are heard at the table. High Desert Partnership strongly believes in neutral 3rd party facilitation in our collaborative process.

13) Continued landowner engagement is critical for continued restoration success, but the application did not clearly describe engagement plans with this community for the initiative. Responses from Brenda Smith, Melissa Petschauer- High Desert Partnership, Samuel Artiaz-Soil Water Conservation District, Teresa Wicks- Bird Alliance of Oregon, Tony Svejcar and Esther Lev-Wet Meadow Partners

Landowners are an integral part of the community in Harney County and in the Harney Basin Wetlands Collaborative. HBWC partners have a track record of innovative approaches to address the unique needs of our rural and underserved communities. Our partners are engaged in diverse work and represent diverse

components of this frontier rural region. The HBWC has a communications plan that emphasizes a results chain strategy for stakeholder engagement.

Landowner engagement associated with the Harney Soil and Water Conservation District (SWCD) Restoration projects within this FIP proposal comes from landowners coming into our office requesting assistance on wet meadow or large diversion structures that do not fall within other funding sources of NRCS waterbird habitat, or OWEB Small grants. Landowners on this current FIP proposal were unreached landowners from the previous FIP initiative and their interest in part has come from over the fence talks i.e. landowner to landowner conversation of the structure replacement. Successful projects begat interested new landowners.

Harney SWCD also conducts a yearly meeting where landowners in the community are invited to attend. We present completed projects within the county through Harney SWCD and funding sources available and ask landowners how we can better assist their issues they face regarding natural resources. This approach has allowed steady engagement by landowners for new projects. Early adopting land owners tend to be the first addressed as they are familiar with funding sources and quick to jump on new opportunities. New landowner interest however, in large scale restoration projects are hard to get to commit without past experience with contracts with Harney SWCD and or partners due to their hesitancy. Providing opportunities from OWEB Small Grant contacts has improved Harney SWCD's ability to increase continued landowner engagement, familiarity with the grant process and address their needs. This opens their trust to ask for larger restoration projects if they require assistance. Landowner's timeline for larger structure replacement is also a big factor. Getting ahead of the 8- ball with projects to allow a few years for time of year for surveying, engineering designs, permits and time of year for replacement needs to fall before the structure or structures are lost. Delays in funding opportunities have caused loss of projects. I am confident with the approval of the proposed FIP, momentum from the restoration projects will occur causing more new landowner interest in requesting assistance in more new restoration projects.

Bird Alliance of Oregon is working with Harney SWCD and leaders from other landscape level projects to understand how we can strategically work with private landowners to help collect bird populations across the landscape. It is our hope that by highlighting the birds in their backyard, particularly charismatic species that are relatively unique to eastern Oregon (e.g., Bobolink, etc.) could not only provide opportunities to expand information about the distribution of birds in the basin, but support projects with private landowners.

Wet Meadow Partners have worked to develop a more in-depth understanding of the ecology of wet meadow ecosystems in relation to water regimes. The tools and products developed are building an information base to help public and private land managers assure wet meadow conditions can be maintained in perpetuity for migratory waterbirds that depend on the habitat. The main tool is a state-and-transition model (STM), which will assist private and public land managers to make more informed agricultural production and wildlife habitat management decisions in response to changing water regimes.

The long-term conservation of flood irrigated wet meadows in the Harney Basin relies on an understanding of the ecology of wet meadow ecosystems in relation to water regimes, especially changeable water regimes. Plant species composition and flooding dynamics of Harney Basin wet meadows have changed dramatically since the 1980s. A less dependable snow pack has meant that more of the floodwaters come from spring rains rather than melting snow pack, and non-native species now dominate a large proportion of wet meadow acres.

Wrap Up

The collaborative space of the Harney Basin Wetlands Collaborative makes it possible for diverse partners to make better decisions that benefit the environment and the community. Harney County knows the importance of the resources it has, including Malheur Lake and the wet meadow systems that surround it. Not only as a productive area for agriculture but also as a productive area for wildlife. It doesn't have to be one or the other. Harney Basin Wetlands Collaborative has been together for 13 years and have faced various tests over time and what we've learned is the simple acts of building relationships and talking about complex issues can be effective ways to reach consensus and find solutions. This is how we have built a culture of collaboration.

The Harney Basin's challenges are not insurmountable, because of the unified collaborative partners that are working to address the intricate issues in the Harney Basin. Harney Basin Wetland Collaborative has built strong relationships, has momentum to work on these issues, and will continue to work together across private and public lands for common benefits.

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Signatures