

Implementation of Senate Bill 212

A Joint Report of the Department of Environmental Quality,
Department of Land Conservation and Development,
Department of Agriculture, and Health Services of the
Department of Human Services

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State of Oregon
Department of
Environmental
Quality



Report to the Legislature

This report has been prepared by the Department of Environmental Quality, Department of Land Conservation and Development, Department of Agriculture, Health Services of the Department of Human Services, in conjunction with local governments and other interested parties, and in accordance with the requirements of ORS 215.246.

Contents

Introduction	1
Implementation of the Amendments	2
Inventory of the Existing Operations	3
A. Reclaimed Water Inventory	4
B. Agricultural and Industrial Process Water Inventory	4
C. Biosolids Inventory	4
D. Septage Inventory	5
Soil Types	6
Reported Effects on Adjacent or Nearby Farm and Forest Operations	6
Conclusion.....	7
Appendices	
I. Response to Public Comments	8
II. 2001 Land Application Laws & DEQ's Procedure for Proposals to Land Apply Reclaimed Water, Industrial Process Water, and Biosolids on Exclusive Farm Use (EFU) Lands.....	15
III. Statement of Intent, House Amendments to SB 212-A, 5/14/2001	18
IV. Bibliography.....	21

Introduction

Senate Bill 212 was passed by the Seventy-first Oregon Legislative Assembly and became effective on June 21, 2001 amending Oregon Revised Statutes (ORS) Chapter 215. The law allows the land application of reclaimed water, agricultural and industrial process water, and biosolids for agricultural, horticultural or silvicultural production on land zoned Exclusive Farm Use (EFU) subject to the issuance of a license, permit or other approval by the Department of Environmental Quality (DEQ) and as provided in ORS 215.246 to 215.251.

The law includes a requirement for a report to the 2003 Legislature on the implementation of the amendments and contains information about the nature and extent of the various land application operations in Oregon. The specific requirements for the report are as follows:

Section 8: The State Department of Agriculture, the Department of Environmental Quality, the Department of Land Conservation and Development and the Health Division of the Department of Human Services, in conjunction with local governments and other parties interested in the land application of reclaimed water, agricultural or industrial process water or biosolids, shall prepare a joint written report to the Seventy-second Legislative Assembly on the implementation of the amendments to ORS 215.213 and 215.285 by sections 1 to 3 of this 2001 Act and sections 4 to 7 of this 2001 Act not later than February 1, 2003. The report shall include an inventory of the number, type, acreage, location and zoning of existing operations applying reclaimed water, agricultural or industrial process water or biosolids to land in Oregon. For biosolids, the inventory shall include an estimate of the amount of land and a general description of the types of land on which the land application is occurring, but the inventory need not identify particular land application sites. The report shall include a description of the methods of transport of reclaimed water, agricultural or industrial process water and biosolids, the soil types of the lands on which the land application occurs, the agricultural, horticultural and silvicultural products grown and the reported effects, if any, on adjacent or nearby farm and forest operations. The report also shall describe the applicable land use regulations, standards or criteria used by the Department of Environmental Quality to evaluate applications for licenses, permits and approvals for the land application of reclaimed water, agricultural or industrial process water or biosolids and include a bibliography of the most relevant articles and reports regarding alternative methods to land application and the possible effects of land application to human or animal health and soil productivity. The report also may include other matters the agencies or interested parties consider pertinent to the purposes of the report. Prior to submittal of the report, the agencies shall distribute a draft of the report to interested parties and take written public comment on it. The final report must describe the written comments received and explain how the comments were addressed.

The report was developed jointly by DEQ, the State Department of Agriculture (ODA), the Department of Land Conservation and Development (DLCD), and Health Services of the Department of Human Services (Health Services). DEQ was the primary author of the report and DLCD provided extensive assistance with writing and contributing to the land use portions of the document. DEQ provided opportunity for public comment from December 16, 2002 to 5:00 PM January 10, 2003 and distributed the draft report to the land application facilitation stakeholders involved in developing the legislation. DLCD distributed the draft report to all county planning directors. Two organizations submitted written comments. Responses to the public comments are included as an appendix to the report.

Implementation of the Amendments

The 2001 amendments to ORS Chapter 215 (Chapter 488 Oregon Laws 2001) permit the land application of reclaimed water, agricultural and industrial process water, and biosolids as an allowed use on land zoned EFU. Furthermore, the amendments prescribe specific requirements for approving land application operations in conjunction with Oregon land use law. Requirements include a process for a local land use decision, in accordance with ORS 197.015 (10), that allows for the opportunity for public comment when land application operations are proposed. This public comment requirement is in addition to any public notification and comment solicitation required by the issuance of a National Pollutant Discharge Elimination System (NPDES) or Water Pollution Control Facility (WPCF) permit by DEQ.

DEQ requires permits for all land application operations and it is the primary objective of DEQ to safeguard public health and the environment when permitting land application operations. DEQ uses a combination of technical assistance, inspections and permitting to help land application operations and citizens understand and comply with state and federal environmental regulations.

Land application can offer an environmentally beneficial and economical method of managing highly treated wastewater and wastewater residuals, and has been practiced in Oregon for over 30 years. Furthermore, the recycling of these materials can be a component of environmental sustainability goals. Applying these materials to the land can improve soil productivity and can provide essential nutrients for crop production. Land application of treated wastewater can provide many benefits, including helping to offset the need for using drinking water supplies for non-drinking purposes and protecting sensitive streams from wastewater discharges while often times being the most economical alternative for managing treated wastewater.

Although the law took effect immediately upon passage, implementation required several preliminary steps. DLCD revised Goal 3 (Agricultural Land) Oregon Administrative Rules (OAR) 660-033 to incorporate these amendments into the statewide program for land use planning. DEQ developed a guidance document describing the procedures the agency uses to process land application proposals in compliance with the legislation (see Appendix II) and trained staff on its use. The guidance document is available to the public so that potential applicants and other interested parties can understand how DEQ processes land application proposals.

Outreach was also conducted to provide information on the new amendments. The Oregon Association of Clean Water Agencies conducted two one-day workshops for its member organizations regarding these amendments. DEQ presented information on agency guidance pertaining to the amendments. Attendees included local planning departments, member wastewater agencies and representatives from the farming community.

Between June 2001 (when implementation of the amendments began) and October 2002, DEQ processed 8 applications subject to the requirements of these amendments. There are several steps the applicants go through prior to receiving approval for land application. These steps include the following: 1) obtain the required DEQ application and Land Use Compatibility Statement (LUCS) form, 2) submit the completed LUCS to the county planning office for its review and approval, 3) the county conducts its land use review process in accordance with the requirements of the law and returns to the applicant the LUCS with any findings in accordance with the law, 4) the applicant submits the DEQ application and approved LUCS to DEQ for processing, 5) DEQ processes the application and conducts a technical review in accordance with its rules and requirements of the law, and 6) the applicant receives final approval from DEQ to conduct its land application operation. DEQ does not approve land application operations until the land use decision process has been completed. Although the amendments require some additional steps in planning and implementing land application operations at the state and local levels, the amendments do provide for a pathway in approving land application on land zoned EFU.

DEQ and DLCD, in cooperation with local planning departments, are working together to ensure that land application operations, subject to the provisions of the law, continue to go through the land use decision process as required. The agencies continue to provide technical assistance to the regulated community and the public. Existing or future guidance may be revised in order to facilitate the sound implementation of the law.

Inventory of Existing Operations

The law requires the Legislative report to include an inventory of the number and type of application sites as well as a number of other facts about land application in Oregon. This proved to be a time-consuming effort because there is currently no statewide database to track this information. The majority of information used to complete this report was gathered from permits, management plans, site authorization letters and annual reports from DEQ's regional and headquarters offices.

To improve data tracking of land application operations, DEQ has secured an EPA database for biosolids and septage management and will begin transitioning to this system in 2003. DEQ is also evaluating options for tracking data for reclaimed water, and agricultural and industrial process water operations. Information that will be collected includes: soil types, field locations, crop types, and nutrient and pollutant loading. These improvements will assist with compliance tracking and make information more readily available to stakeholders and other interested parties.

The land application of reclaimed water, agricultural and industrial process water, and biosolids has occurred in virtually every county in the state. Currently, 33 out of 36 counties have active land application operations. The total amount of land used for land application activities in 2001 was approximately 41,938 acres, as follows:

Reclaimed water	3,950 acres
Agricultural process water	18,450 acres
Industrial process water	153 acres
Septage	767 acres
Biosolids	<u>18,618 acres</u>
Total:	41,938 acres

According to the Oregon Agricultural Statistics Office there are 17.2 million acres of land in farms throughout Oregon. Approximately 16 million of those acres are zoned EFU. Thus, land application occurs on 0.24% of all farmland. Approximately 80% of land application operations have sites located on land zoned EFU. Thus, land application occurs on 0.21% of all farmland zoned EFU.

A. Reclaimed Water Inventory

Definition: The term reclaimed water refers to highly treated effluent from municipal wastewater treatment facilities and processes that has been treated to such a high level it can be used safely and effectively for non-drinking water uses such as landscape and agricultural irrigation, heating and cooling, and industrial processing.

Treatment Standards: Treatment standards and reuse requirements are prescribed in OAR 340-055 (Regulations Pertaining to the Use of Reclaimed Water (Treated Effluent) from Sewage Treatment Plants) and include specific site management and crop use requirements. There are several regulatory requirements a land application operation must follow in order to apply reclaimed water to the land. Any facility that land applies reclaimed water must have a NPDES or WPCF permit from DEQ. DEQ consults with Health Services during the permitting process to determine if there are any issues associated with public health. Part of this consultation consists of Health Services reviewing reclaimed water applications prior to DEQ approval. A Reuse Management Plan is a component of every permitted land application operation and describes the generation and management of the reclaimed water. Details include a description of the quantity and quality of reclaimed water, treatment methods used at the treatment plant to clean the wastewater, transportation of the reclaimed water to the land application site, soil characteristics, pollutants, nutrients, crop requirements, buffers to surface and ground water, and agronomic rate calculations which describe the amount of reclaimed water that will be land applied to meet the nutrient and water consumption requirements of the crop.

Prior to land application, reclaimed water undergoes extensive treatment that removes pollutants and pathogens in the wastewater. Reclaimed water is categorized into four levels (Level I-IV) based on its quality following the treatment process. The allowed use is dependent on the level of treatment that has been achieved during the

Report to the Legislature

treatment process. For example, Level IV reclaimed water can be land applied with fewer restrictions and to more varieties of crops, compared to Level I, because it has undergone more extensive treatment.

Facility Information: Approximately 89 municipal wastewater treatment facilities are permitted by DEQ to land apply reclaimed water. These facilities apply reclaimed water to 3950 acres of land since 2000 consisting of several types of crops. The primary crop grown is grass for pasture or hay production. Reclaimed water is also applied to golf courses, poplar and Christmas trees, recreation ball fields, and is used by treatment facilities for landscape irrigation. All reclaimed water is distributed to land application sites via irrigation pipelines. There is one facility that distributes reclaimed water for use as cooling water in power generation. Approximately 90% of these facilities apply reclaimed water to land zoned EFU. The other facilities apply to land zoned for forest, light or heavy industrial, or in combination with EFU land. The majority, approximately 85%, of reclaimed water operations are conducted on publicly owned land where the municipality is ensured long-term use of the property. Many of the operations are in part managed or leased by commercial growers who are responsible for the day-to-day farming operations.

B. Agricultural and Industrial Process Water Inventory

Definition: The terms “industrial process water” and “agricultural process water” when used in the context of land application refer to wastewaters that have undergone some level of biological treatment and have been deemed suitable in quality for use for beneficial purposes. These wastewaters do not contain sewage; if they were mixed with sewage they would be classified as domestic wastewater. For the purposes of this report, agricultural process water refers specifically to wastewater derived from the processing of fruit, vegetables, or other food products. Industrial process water refers to wastewater from any process of industry, manufacturing, trade, or business, or from the development or recovery of any natural resources. Examples of industrial process water include wastewater from pulp and paper processing, blow down water from power generation, and wash water from aggregate processing.

Treatment Standards: The basis for regulation of agricultural and industrial process water is found in OAR 340-045 (Regulations Pertaining to NPDES and WPCF Permits) and DEQ’s “Guidelines for Land Application of Industrial Wastewater.” Reuse activities require a NPDES or WPCF permit issued to the generator of the process water. These permits govern the use of process waters and include a detailed Reuse Management Plan, similar to plans required for reclaimed water, which describes the land application operation from the point of wastewater generation to the final end-use through land application.

Facility Information: Approximately 25 facilities land apply agricultural process water and 7 facilities apply industrial process water. These facilities apply process water to 18,603 acres of land since 2000. Agricultural process water accounts for 99% of the acreage. All but one facility land apply process water on privately owned land. Facilities are typically adjacent to or in close proximity to land application sites. Thus, process water is transported via irrigation pipeline directly to the site for land application or stored in temporary holding lagoons. The process water is applied to feed and food crops, pasture, and a limited volume is applied to trees for fiber production. The majority of process water is applied to land zoned EFU. Three facilities land apply to areas zoned light industrial or heavy industrial.

C. Biosolids Inventory

Definition: The term biosolids refers to the nutrient-rich organic solids that are derived from wastewater treatment at municipal wastewater treatment facilities and have undergone extensive treatment to meet federal and state regulations that allow their use for land application.

Treatment Standards: OAR 340-050 (Land Application of Domestic Wastewater Treatment Facility Biosolids, Biosolids Derived Products, and Domestic Septage) prescribes the methods, procedures, and restrictions for biosolids land application in Oregon. Best management practices, public notification requirements, and record keeping and reporting requirements are included in OAR 340-050. Furthermore, these rules reference the federal biosolids regulations (Part 503 Standards for the Use or Disposal of Sewage Sludge, Subchapter O in Chapter I of Title 40 of the Code of Federal Regulations), which are used to set minimum pollutant and treatment standards.

Report to the Legislature

Treatment includes pathogen reduction and vector attraction reduction requirements. OAR 340-045-063 (Industrial Pretreatment) and federal pretreatment regulations (40 CFR Part 403) prescribe pretreatment standards for non-domestic discharges to wastewater treatment facilities. Many Oregon wastewater treatment facilities are required to have pretreatment programs. These programs are designed to reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewer systems, and thereby, reduce the amount of pollutants going into biosolids or reclaimed water. Some communities have set more stringent standards in their pretreatment programs than is required by the state, in order to ensure higher quality biosolids (see Appendix I, Comment 4). These regulations are administered through a NPDES or WPCF permit issued by DEQ to the wastewater facility that generates the biosolids.

The majority of biosolids produced in Oregon meet the treatment standards required by state and federal regulations, and are applied to the land as soil amendments and nutrient sources for crop production. If they do not meet standards, then they must be disposed of at a sanitary landfill.

It is important to note that there are limited alternatives for managing biosolids. Recycling biosolids via land application is the most predominate method used in Oregon and in the United States. The other methods include landfilling and incineration. DEQ encourages the recycling of biosolids, compared with disposal at a landfill or incinerator, when it is done in a manner which protects public health and maintains or improves environmental quality.

Facility Information: There are approximately 332 domestic wastewater treatment facilities that are capable of generating biosolids. Of these facilities, 108 applied biosolids to 18,618 acres of land in 2001. Three of these facilities operate wastewater lagoons, which typically require land application of biosolids once per decade or every other decade. One hundred and seven of these facilities transported biosolids from the respective wastewater facility to the field for land application via truck. The truck is typically outfitted for manure application and thus is designed for operation in farm fields. Only one facility uses an existing irrigation pipeline to transport biosolids for land application. The land application process occurs prior to the crop being planted or when the harvestable portion of the crop is not exposed.

Biosolids are primarily applied to hay and pasture crops. These types of crops account for about 95% of the land application operations. Other crops include trees, feed corn, wheat, and nursery products. Biosolids are also periodically used for soil improvement projects, such as on federal Conservation Reserve Program lands and to restore decommissioned forest roads. Four wastewater facilities in the state produce a biosolids compost which is either sold or given away to the public. Biosolids compost products that are bagged and provide a nutrient guarantee are subject to the same ODA fertilizer registration process as commercial fertilizer products.

The majority of biosolids are applied to land zoned EFU. Approximately 80% of biosolids land application operations have one or more sites zoned EFU. The next most frequent zoning designation is Farm Forest. There are a limited number of land application sites zoned Industrial or Forest Conservation. Approximately 80% of land application sites are under private ownership. The remaining land is owned by the local government that operates the wastewater treatment facility.

D. Septage Inventory

Definition: The term domestic septage is defined in OAR 340-050 and refers to the domestic wastewater from residential and commercial septic tanks. This does not include liquid or solid material removed from septic tanks that receive either commercial wastewater or industrial wastewater. For the purposes of Senate Bill 212 septage was included in the definition of biosolids but separated in the legislative report because of how it is regulated.

Any person who operates a Sewage Disposal Service as defined by OAR 340-071 is required to have a valid Sewage Disposal Service License issued by DEQ. There are currently 166 licensed Sewage Disposal Services (pumpers) operating statewide. One of the services offered by licensed businesses is the removal and disposal of septic tank pumpings (septage) from residences and commercial operations. Most of the septage is disposed at municipal wastewater treatment facilities. Another option for disposal is to beneficially use the septage through land

Report to the Legislature

application. Prior to land application the licensed business or land owner must obtain a WPCF permit from DEQ which governs the land application practice in accordance with OAR 340-050..

Treatment Standards: Treatment standards and land application requirements are prescribed in OAR 340-050. The septage is physically screened of any objectionable items (i.e. plastics), lime is added to destroy pathogenic organisms and the septage is applied to the land in accordance to a Septage Management Plan. The management plan describes septage quality, site characteristics, mandatory buffers to surface and groundwater, and agronomic rate calculations that determine the volume that can be applied per acre.

Facility Information: In Oregon, approximately 13 out of 166 Sewage Disposal Services operations are permitted for land application. This accounts for less than 10% of the total volume of septage pumped from homes and commercial businesses annually. This volume was transported by truck and applied to a total of 767 acres in 2001. The remaining volume was disposed at municipal wastewater treatment facilities where it becomes part of the domestic wastewater stream and ultimately treated to become biosolids. The acreage consisted primarily of grass for hay and pasture. In addition, septage was applied to land in the federal Conservation Reserve Program and a small parcel of forestland. The majority of the acreage is zoned EFU or Farm Forest. All but one of the facilities is owned and operated on privately owned land.

Soil Types

The law requires that the report include information on the soil types at application sites. However, this information is not readily available for the existing operations. Verification of each soil type would require manual review of each land application permit and management plan. DEQ intends on including soil information as part of their data tracking efforts for future land application operations. Generally speaking, the soils found at land application sites include hundreds of the more than 2000 types of soils found in Oregon.

Before a land application site is permitted, the soil at the site is evaluated to determine if or how it is suitable for the specific land application project. This evaluation includes the nutrient, water, and pollutant capacity of the soil, and the productivity with respect to the known or desired crop yield of a specific site. University Extension fertilizer guidelines are used to determine appropriate nutrient requirements of the crop. Depending on the land application operation and material being land applied, soil testing is conducted during the course of the operation to evaluate pollutant and/or nutrient status in order to assist with short and long-term site planning.

Most land application operations take place at sites with soils that are already suitable for the production of crops. The application supplements the existing nutrient or irrigation program. However, biosolids are often applied to non-agricultural soils to improve or restore marginally productive sites. The high organic matter content of biosolids can improve the productivity of a soil or in some cases restore non-productive soil into fertile agricultural land.

Reported Effects on Adjacent or Nearby Farm and Forest Operations

There have been a limited number of reported incidents where land application operations have resulted in adverse effects to adjacent or nearby farm or forest operations. In the past five years there have been one agricultural process water, one reclaimed water, and two biosolids land application operations that have resulted in verified adverse effects. These incidents may have been preventable with additional management controls at the land application sites. Two of the incidents were the result of acute rain events that caused run-off onto adjacent properties. One of the run-off events caused the owner of the property to vacate the premises. The other two incidents were the result of over application that caused run-off or overspray onto adjacent properties. There have not been any documented long-term environmental effects from these incidences. Incidents involving overspray of reclaimed water or agricultural process water have occurred due to changes in wind speed or direction. Overspray is managed by designing irrigation systems to automatically shut-off at a specified wind speed or by closely monitoring irrigation systems when wind is problematic.

Report to the Legislature

If an incident results in an impact to adjacent or nearby farm or forest operations DEQ will take enforcement action and may revoke the authority to operate at that land application site. In addition, there are instances where operators have voluntarily withdrawn land application sites prior to enforcement actions.

Conclusion

As of October 2002, eight land application operations that have been subject to the requirements of these amendments have been permitted for land application on land zoned EFU. Local and state agencies, and the regulated community should continue to coordinate efforts through updating guidance, continued trainings, and regular communication in order to maintain sound implementation of these amendments.

Appendices

I. Response to Public Comments

Comment period The public comment period opened on December 16, 2002 and closed at 5:00 p.m. on January 10, 2003.

Two organizations submitted written comments: the Oregon Association of Clean Water Agencies (ACWA), and the Umatilla County Resource Services and Development Department Planning and Development Division (Umatilla).

Organization of comments and responses Summaries of individual comments and agency responses are provided below. The commenter is identified in parenthesis. General comments are followed by specific comments.

General Comments

<p>Comment 1 (ACWA) Importance of reclaimed water in meeting Oregon's water resource needs</p>	<p>The report inadequately stresses the important role that reclaimed water can play in meeting Oregon's water resource needs. Oregon does not have adequate water to meet its growing municipal, agricultural, industrial, and commercial needs while attempting to maintain adequate in-stream flows. Substituting reclaimed water for potable water, where environmentally sound and appropriate, is a critical factor in meeting the State's water demands. This will be particularly important in the future as the State's population increases.</p>
<p>Response</p>	<p>The report presents an inventory of reclaimed water, agricultural and industrial process water, and biosolids land application operations in Oregon. A comprehensive description of the numerous potential environmental benefits from recycling these materials was not included in the scope of the report. Under the section, "Implementation of the Amendments", the land application of treated wastewater is described as helping to "offset the need for using drinking water supplies for non-drinking purposes and protecting sensitive streams from wastewater discharges".</p> <p>No changes were made in response to this comment.</p>
<p>Comment 2 (ACWA) Recognize reclaimed water and biosolids recycling as sustainable practices.</p>	<p>Beneficially reusing municipal wastewater and biosolids is an element of achieving the State's sustainability goals, and the sustainability aspects of reclaimed water and biosolids use should be added to the report.</p>
<p>Response</p>	<p>Information was added to the "Implementation of the Amendments" section of the report in response to this comment.</p>
<p>Comment 3 (ACWA) Recognize the agricultural benefits of biosolids application.</p>	<p>Research by Oregon State University has demonstrated the soil quality improvement and crop yield increase where biosolids are properly applied to agricultural land. Recycling biosolids to farm land improves soil properties, such as reduced soil erosion, improved tilth, texture, increased earth worm and microbial activity, and water holding capacity, which make</p>

Report to the Legislature

	<p>conditions more favorable for root growth and increases the drought tolerances of vegetation. Biosolids application also supplies nutrients essential for plant growth, including nitrogen, sulfur and phosphorus, as well as some essential micro- nutrients such as nickel, zinc, copper, molybdenum, and selenium. Biosolids can also serve as an alternative to substitute for expensive chemical fertilizers, reducing costs to Oregon farmers.</p> <p>The nutrients in the biosolids offer several advantages over those of chemical fertilizers because biosolids contain both organic and inorganic forms of nutrients. The small percentage of inorganic nutrients found in biosolids provides a quick release of nutrients for immediate crop growth and the larger percentage of organic nutrients found in biosolids are released slowly, throughout the growing season to plants. These organic forms of nutrients are less water-soluble and, therefore, less likely to leach into groundwater or run off into surface waters.</p>
<p>Response</p>	<p>The report presents an inventory of reclaimed water, agricultural and industrial process water, and biosolids land application operations in Oregon. A comprehensive description of the numerous potential environmental benefits from recycling these materials was not included in the scope of the report. Under the section, “Implementation of the Amendments”, the land application of biosolids is recognized as improving soil productivity and providing essential nutrients for crop production.</p> <p>No changes were made in response to this comment.</p>
<p>Comment 4 (ACWA) Oregon’s municipalities’ environmental track record for excellence in pretreatment and biosolids.</p>	<p>Expand report to discuss Oregon’s pretreatment program. Successful biosolids land application programs are built on the back of successful pretreatment programs that adequately identify and control toxics. Oregon’s local government pretreatment and biosolids programs have been identified as national leaders by the federal EPA, on a routine basis. ACWA members that have won national EPA recognition have included: Pretreatment Program; City of Salem – First place nationally, Clean Water Services – First and second places nationally, Metropolitan Wastewater Management Commission/City of Eugene/City of Springfield – Second place nationally, and City of Wilsonville – First place nationally. Biosolids Program; OMI; Gresham – First place nationally, OMI; Hood River - First place nationally, City of Portland – Second place nationally, and Clean Water Services – Second place nationally. These national honors emphasize the strength of the regulatory programs in place at the local and state level for preventing toxic materials from reaching land application systems and in meeting environmental standards for land application of biosolids.</p> <p>Some communities, such as the Metropolitan Wastewater Management Commission (City of Eugene, City of Springfield and portions of Lane County) have set more stringent standards in their pretreatment programs than is required by the state, in order to ensure higher quality biosolids.</p>
<p>Response</p>	<p>The report was modified to include information regarding pretreatment in relation to biosolids treatment in response to this comment.</p>

Report to the Legislature

<p>Comment 5 (ACWA) Biosolids land application alternatives</p>	<p>Municipal wastewater treatment processes produce biosolids. The water quality benefits of advanced wastewater treatment facilities depend on routine removal of biosolids. These biosolids must be managed; they do not go away. The options are limited and include: Incineration, Landfilling, and Beneficially reusing biosolids. The report should be clearer about the environmental impacts and consequences of pursuing either of the other alternatives.</p>
<p>Response</p>	<p>A statement regarding management alternatives was added under the “Biosolids Inventory, Treatment Standards” section in response to this comment.</p>

Specific Comments

<p>Comment 6 (ACWA and Umatilla) Implementation of the Amendments</p>	<ul style="list-style-type: none"> • There are numerous benefits to an environmentally sound reclaimed water and biosolids program. This needs to be stressed. Add emphasis to the word “can”. • This paragraph is written in an objective context, describing the presumed benefits of land application. To be consistent, the second sentence should read, “[a]pplying these materials to the land can improve soil productivity and <u>can provide supplement</u> essential nutrients for crop production.
<p>Response</p>	<ul style="list-style-type: none"> • See responses to comments 1 and 2. No changes were made in response to this comment. • In order to remain consistent with the original language of the report the word “can” was added in response to this comment.

<p>Comment 7 (ACWA) Related to Inventory of Existing operations</p>	<p>It would be helpful to have an inventory of the reclaimed water being used in urban settings such as irrigation water for golf courses, parks, schools, airports, or large tracts of municipally owned land, and the amount of EFU land that is municipally owned. This inventory of current uses could be the catalyst for increased reclaimed water uses in the state.</p>
<p>Response</p>	<p>The law requires the report to include an inventory of the number and type of application sites as well as a number of other facts about land application in Oregon. This proved to be a time-consuming effort because there is currently no statewide database to track this information. An inventory of the reclaimed water being used specifically in urban settings or large tracts of municipally owned land, or of the amount of EFU land that is municipally owned would require the use of a detailed tracking system (i.e. electronic database) or additional resources to gather the information.</p> <p>As stated in the report, to improve data tracking of land application operations, DEQ has secured an EPA database for biosolids and septage management and will begin transitioning to this system in 2003. DEQ is also evaluating options for tracking data for reclaimed water and agricultural and industrial process water operations. Information that will be collected includes: soil types, field locations, crop types, and nutrient and pollutant loading. These improvements will assist with compliance tracking and make information more readily available to stakeholders and other interested parties.</p>

Report to the Legislature

	No changes were made in response to this comment.
Comment 8 (ACWA) Inventory of Existing operations	Modify definition of “reclaimed water” to read “...refers to highly treated effluent from municipal wastewater treatment facilities and <u>processes</u> that has been treated...”
Response	The word “processes” was added to the definition of reclaimed water in response to this comment.
Comment 9 (ACWA) Biosolids Inventory, Treatment Standards	The report should be clear that biosolids that do not meet the treatment standards are landfilled. The existing sentence in the report implies that they are land applied, tested, then treated if need be.
Response	Biosolids that do not meet federal and state standards can not be applied to the land. Typically, biosolids that do not meet these standards are disposed at a sanitary landfill. The sentence under the “Biosolids Inventory, Treatment Standards”, section was changed in response to this comment.
Comment 10 (ACWA) Biosolids Inventory, Treatment Standards	Additional information on biosolids composting operations is needed.
Response	Composting is one of the many processes used in the treatment and generation of biosolids. Other treatment processes, such as anaerobic and aerobic digestion are used on a far greater scale in Oregon to meet federal and state biosolids treatment standards. A description of the various processes and specific biosolids operations were not in the scope of this report. Detailed information on the various biosolids operations and treatment technologies can be obtained from DEQ or local municipal wastewater treatment facilities. No changes were made in response to this comment.
Comment 11 (ACWA) Septage Inventory	<ul style="list-style-type: none"> Stress that commercial septic tanks contain sanitary, not industrial wastes. Additional information on the percentage of septage that is treated at a municipal treatment plant and that which is land applied is needed.
Response	<ul style="list-style-type: none"> The land application of domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receive either commercial wastewater or industrial wastewater. <p>Additional information was added to the “Septage Inventory, Definition” section in response to this comment.</p> <ul style="list-style-type: none"> In Oregon, approximately 13 Sewage Disposal Services operations are permitted for land application. This accounts for less than 10% of the total volume of septage pumped from homes and commercial businesses annually. The remaining 90% was disposed at municipal

Report to the Legislature

	<p>wastewater treatment facilities where it becomes part of the domestic wastewater stream and ultimately treated to become biosolids.</p> <p>Additional information was added to the “Septage Inventory, Facility Information” section in response to this comment.</p>
<p>Comment 12 (ACWA and Umatilla) Reported Effects to Adjacent or Nearby Farm or Forest Operations</p>	<ul style="list-style-type: none"> • The four examples are what percentage of biosolids land application activities over those 5 years? • Additional information in an appendix on each of these cases would be useful. For instance, in the case an acute rain event that caused the owner of the property to vacate the premises. This property had been flooded by similar rain events in the past - - unrelated to nearby biosolids application. • One sentence claims that there “have not been any documented long-term environmental effects from these incidences.” Do you have similar information relative to the impact to human health? • Will DEQ take enforcement action if there is an impact to residential, industrial or commercial land? • It may be worthwhile to mention that permits do not allow an applicator or the application process to trespass onto adjacent lands regardless of land use or zoning.
<p>Response</p>	<ul style="list-style-type: none"> • Two of the four reported effects to adjacent farm and forest operations were related to biosolids and account for approximately 0.5% of all land application sites approved within the past 5 years. As stated in the report, these incidents may have been preventable with additional management controls at the land application sites and two of the incidents were the result of acute rain events that caused run-off onto adjacent properties. It is improbable that acute rain events or other unpredictable severe weather events can be accounted for more than a few days in advance of the event. The law states that the land application “inventory need not identify particular land application sites”. Detailed information on the four reported effects is available from DEQ regional offices. • The four incidents were in relation to physical impacts to adjacent farm or forest operations and no impacts to human health were reported. Long-term effects to the environment accounts for the time since the incidents were reported. • DEQ takes enforcement action, when necessary, regardless of land use zoning. This includes any effects to residential, industrial or commercial land. • DEQ permits and authorizes land application to specific sites with pre-determined legal boundaries. DEQ does not permit or authorize land application to property without owners consent. <p>No changes were made in response to this comment.</p>
<p>Comment 13 (Umatilla) Definition of Land Use</p>	<p>It may be useful to footnote the definition of “land use decision.”</p>

Report to the Legislature

<p>Response</p>	<p>The definition of “Land Use Decision” in accordance with ORS 197.015 (10) is as follows:</p> <p>"Land use decision":</p> <p>(a) Includes:</p> <p>(A) A final decision or determination made by a local government or special district that concerns the adoption, amendment or application of:</p> <p>(i) The goals;</p> <p>(ii) A comprehensive plan provision;</p> <p>(iii) A land use regulation; or</p> <p>(iv) A new land use regulation;</p> <p>(B) A final decision or determination of a state agency other than the commission with respect to which the agency is required to apply the goals;</p> <p>or</p> <p>(C) A decision of a county planning commission made under ORS 433.763;</p> <p>(b) Does not include a decision of a local government:</p> <p>(A) Which is made under land use standards which do not require interpretation or the exercise of policy or legal judgment;</p> <p>(B) Which approves or denies a building permit issued under clear and objective land use standards;</p> <p>(C) Which is a limited land use decision;</p> <p>(D) Which determines final engineering design, construction, operation, maintenance, repair or preservation of a transportation facility which is otherwise authorized by and consistent with the comprehensive plan and land use regulations; or</p> <p>(E) Which is an expedited land division as described in ORS 197.360;</p> <p>(c) Does not include a decision by a school district to close a school;</p> <p>(d) Does not include authorization of an outdoor mass gathering as defined in ORS 433.735, or other gathering of fewer than 3,000 persons that is not anticipated to continue for more than 120 hours in any three-month period; and</p> <p>(e) Does not include:</p> <p>(A) A writ of mandamus issued by a circuit court in accordance with ORS 215.429 or 227.179;</p> <p>(B) Any local decision or action taken on an application subject to ORS 215.427 or 227.178 after a petition for a writ of mandamus has been filed under ORS 215.429 or 227.179; or</p> <p>(C) Any decision in a declaratory judgment action under section 1, chapter 955, Oregon Laws 2001.</p> <p>The report was amended to include the citation “(ORS 197.015 (10))” next to the term “land use decision”.</p>
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<p>Comment 14 (Umatilla) Implementation of the Amendments</p>	<p>Modify the report to include the following edits:.. “DLCD revised Goal 3....to address <u>incorporate</u> these amendments into the statewide program for land use planning. AND “The guidance <u>document</u> is available to the public...”</p>
<p>Response</p>	<p>The report was modified in response to this comment</p>

<p>Comment 15 (Umatilla) Implementation of the</p>	<ul style="list-style-type: none"> • Include a sentence or footnote explaining that if a LUCS is submitted without findings it will be sent back to the local planning department.
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Report to the Legislature

Amendments	<ul style="list-style-type: none"> A LUCS is not specifically listed in the paragraphs describing the process for the other three types of waste (it is listed for septage). The reference should be consistent for each type of waste describing the process
Response	<ul style="list-style-type: none"> The guidance document states that DEQ does not approve land application operations until the land use decision process has been completed. DEQ and DLCD, in cooperation with local planning departments, are working together to ensure that the land use decision process is being conducted in accordance with the provisions of the law. No changes were made in response to this comment. When a LUCS is required for a land application operation that is subject to the provisions of the law, there is no discretion regarding the type of waste including reclaimed water, agricultural and industrial process water, biosolids or septage. The report was modified to remove inconsistent language regarding the use of a LUCS for septage operations.
Comment 16 (Umatilla) Reclaimed Water Inventory, Facility Information	Clarify if reclaimed water is piped directly from the source or simply applied via irrigation pipelines
Response	Reclaimed water is typically piped directly from the source to the land application site. Reclaimed water is not distributed via irrigation canals. No changes were made in response to this comment.
Comment 17 (Umatilla) Industrial Process Water	Include food processing waste as an example of industrial process water.
Response	Food processing water is “agricultural process water” which is also a type of “industrial process water”. No changes were made in response to this comment.
Comment 18 (Umatilla) Bibliography	Include the extensive bibliography at the end of the report. Was the bibliography used in writing the report?
Response	The report was modified to include the Bibliography at the end of the report. A provision of the law (Section 8, Chapter 488, Oregon Laws 2001), requires a bibliography of the most relevant articles and reports regarding alternative methods to land application and the possible effects of land application to human or animal health and soil productivity. The bibliography was not used to generate information for the various sections of the report. The bibliography also includes several articles and publications that describe potential benefits of land application and relative technical justification for land application.

II. 2001 Land Application Laws & DEQ's Procedure for Proposals to Land Apply Reclaimed Water, Industrial Process Water, and Biosolids on Exclusive Farm Use (EFU) Lands

Purpose: This document is intended to provide information on the 2001 Legislative Act relating to land application practices and land use regulations (Senate Bill 212), and also describes the steps that the Department of Environmental Quality (DEQ) uses to process land application proposals in compliance with this Act.

History and Benefits of Land Application: The land application of organic residuals and reuse of wastewater (reclaimed water) has been practiced in Oregon and nationally for decades. When done in accordance with appropriate environmental regulations and guidance, land application is beneficial for a number of reasons. Biosolids contain soil amendment properties as well as important nutrients that can improve crop production. Reclaimed water and industrial process water can provide nutrient benefits and reduce the demand for irrigation water from ground or surface water sources. The use of reclaimed water can also reduce the demand for potable water supplies, which can be used instead for drinking water and instream flow protection. Water quality and water availability continue to be serious issues confronting growing communities in Oregon. Finding appropriate uses for reclaimed water, industrial process water, and biosolids are necessary options for many communities in their efforts to comply with federal and state water quality laws. The practice of land application presents important conservation potential and helps extend existing water supplies. Organic residuals and wastewater that were once considered waste products to be disposed, are now valuable resources.

Until the passage of the 2001 legislation, there was considerable uncertainty regarding the land use requirements for land application on EFU zoned lands. Questions existed about whether particular land application activities were farm uses, utility facilities or something else. In 1999, Jackson County approved the City of Ashland's land application proposal as a farm use without making a formal land use decision, and signed-off accordingly on DEQ's Land Use Compatibility Statement (LUCS). This decision was appealed by a citizen group to the Land Use Board of Appeals (LUBA). LUBA concluded that the County's decision constituted a "land use decision" under ORS 197.015 (10)(b)(A) and that the County failed to provide public notice and an opportunity for hearing. LUBA also determined that under current law in this case, and using the appropriate decision-making process, land application may be determined a farm use or a utility facility use. The City appealed the decision to the Court of Appeals. The Department of Land Conservation and Development (DLCD), Department of Agriculture (ODA) and DEQ submitted an amicus brief, which supported the position that county notice and opportunity for hearing should be required for land application activities. The Court of Appeals upheld LUBA's decision on this point. In another case, *Cox v. Polk County*, the Court of Appeals reversed LUBA's decision that the proposed land application was a utility facility, however let stand the county and LUBA's determination that the proposed use was a farm use.

The Ashland court case triggered a mediation that involved the affected agencies and interested parties. Key issues identified in the mediation process included:

- The lack of direct reference to land application as an allowable use in the EFU statutes (ORS 215); and, uncertainty over whether such activities were a "farm use" or a "utility facility".
- Land application practices and regulations and related public health and safety issues.
- The implications of city ownership of EFU land and land application practices on available EFU land in the State, particularly on lands adjacent to Urban Growth Boundaries.

Legislative Remedy: In 2001, the Legislature approved Senate Bill 212, amending ORS 215.213 and 215.283. Highlights of the Act include:

- Subject to issuance of a permit or approval by DEQ, land application of industrial process water, reclaimed water and biosolids is an allowed use on EFU zoned land. Because land application is listed as an allowed use in ORS 215.213(1), counties may not impose additional land use restrictions or conditions on land application practices, beyond those specified in the statute.
- Other facilities or uses on the same EFU tract are included in the allowed use if they are accessory to and reasonably needed for land application to occur on the proposed site. The Act also disallows certain uses, e.g. utility facility service lines.

Report to the Legislature

- Before a county land use decision is made on a land application proposal, the applicant responds in writing to public comments received by the county that identify alternative sites or methods for managing the industrial process water, reclaimed water or biosolids. The applicant’s response describes how the alternative sites or methods were considered and why they were not selected. The land use decision can not be remanded or reversed, unless the applicant fails to provide a written response when required.
- DEQ is required to determine, through its review and approval process, that the practice of land application will not reduce the productivity of the subject land.
- Land application of biosolids is exempt under the Act when transported by vehicle to EFU land (a DEQ LUCS is not required).
- Land application of materials that are not described in the Act are not subject to the Act’s provisions, e.g. confined animal feeding operation wastes.
- Land division, for purposes of land application, is not allowed in EFU zones.
- Restrictions apply in changing the use of land where land application practices has occurred.

Process for Land Application Proposals: As the State Agency that issues environmental approval for land application practices, DEQ has consulted with the DLCDC, ODA, and Department of Human Services (DHS) to ensure that its process meets the intent of the new Act. The following steps described below apply to:

- New land application proposals (except those involving vehicle transport of biosolids).
 - Significant modifications to permits, approvals and permit renewals, e.g. use of additional lands.
1. The applicant obtains the required DEQ application and LUCS forms, and submits the LUCS to the county planning office for its review and approval.
 2. The county conducts its land use review process in accordance with the requirements under the Act.
 3. The county completes the LUCS form and returns it to the applicant with the attached findings:
 - The proposed activity constitutes land application for purposes of agricultural, horticultural, silviculture production, or for irrigation in connection with a use allowable in EFU zoned land under ORS 215.
 - Any proposed facilities necessary for the land application practice to occur on the subject site are accessory to and reasonably necessary as allowed by the Act.
 - Approval of the LUCS is subject to DEQ’s issuance of the necessary environmental approvals or permits.
 4. The applicant submits the DEQ application and approved LUCS to DEQ for processing. DEQ processes the application and conducts a technical review in accordance with its rules. The review, depending on what material is applied to the land, may include the following:
 - Pollutant and nutrient testing
 - Determination of agronomic rate
 - Determination of agronomic or pollutant loading
 - Determination of water assimilation capacity
 - Site assessment and evaluation
 - Crop type and cropping system
 - Application methods and equipment requirements
 - Site access and harvest restrictions
 - Monitoring requirements
 - A written determination that the land application activity will not reduce the productivity of the land in question.
 5. DEQ submits all Reclaimed Water Reuse Plans to the DHS for comment (OAR 340-055-0015(2)), and consults with DHS on any effluent quality limitations (OAR 340-055-0015(4)).
 6. Applicants intending to land apply reclaimed water are required to submit a “Registration of Reclaimed Water Use” form (<http://wrd.state.or.us/publication/pdfs/reclaimform96.pdf>) to the Water Resources Department (ORS 537.131, 537.132 and 537.610(h)). Either agency can supply applicants with this form, however it requires a DEQ signature.
 7. DEQ issues an approval or denial to the applicant, and provides a copy to the county planning office.

In situations where a LUCS is denied or appealed:

1. When DEQ receives a county-denied LUCS, the applicant is informed that DEQ

Report to the Legislature

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2. can not process the application until county approval is provided.
If a county land use decision is appealed after DEQ receives an approved LUCS, DEQ's policy is to process the application unless ordered otherwise by a court stay or invalidation of the county decision. A county may withdraw or modify its LUCS decision before the permit is issued.
3. If a county-approved LUCS is successfully appealed after DEQ issues a permit, DEQ may revoke or suspend the permit, or delay its decision until the appeals process is exhausted. In making its decision, DEQ consults closely with the applicant and county government.

Landappimpl.doc 1/08/02

Report to the Legislature

III. Statement of Intent, House Amendments to SB 212-A, 5/14/2001

The following statement of intent has been prepared on behalf of the coalition of entities responsible for developing the House Amendments to A-Engrossed SB 212, sponsored by Senator Messerle. This coalition includes representatives of the Sabroso Company, the Northwest Food Processors Association, the Oregon Farm Bureau, the Oregon League of Cities, the Oregon Association of Clean Water Agencies, the Oregon Department of Agriculture, the Department of Environmental Quality, the Department of Land Conservation and Development, and the Governor's Office. This group has been working to create a clear set of standards for the land application of reclaimed water, agricultural or industrial process water, and biosolids.

Sections 1, 2 and 3

A. Under sections 1, 2 and 3 of the House Amendments, the land application of reclaimed water, agricultural or industrial process water, or biosolids, and associated uses are added as a permitted use under ORS 215.213(1) and ORS 215.283(1) on lands zoned for exclusive farm use. The House Amendments move the authorization for these uses from a stand-alone section of ORS ch. 215 to 215.213(1) and 215.283(1) in order to ensure that the uses are subject to the holding of the Oregon Supreme Court in *Brentmar v. Jackson County*, 321 Or 481 (1995) where the Court determined that counties may not adopt or apply additional local land use criteria or standards governing the uses listed in subsections (1) of 215.213(1) and 215.283(1).

B. The uses allowed under the new ORS 215.213(1)(cc) and 215.283(1)(z) are defined and limited in several ways. First, the substance that is land applied must be reclaimed water, agricultural or industrial process water, or biosolids. The terms “reclaimed water, agricultural or industrial process water, [and] biosolids” are intended to include all of the types of substances that are or may be approved for land application under a license, permit or approval of the Department of Environmental Quality (DEQ). These substances include, without limitation, septage that meets the requirements of ORS 454.800.

The substance being applied to the land also must be applied for agricultural, horticultural or silvicultural production, or for irrigation in connection with another use allowed in the zone, such as a golf course or park. And, the use must be one that is subject to a license, permit or other approval of the Department of Environmental Quality (DEQ) under one of the listed statutes. These statutory references include licenses for the disposal of septage, National Pollution Discharge Elimination System (NPDES) permits (where there is some discharge to waters of the United States), and Water Pollution Control Facility (WPCF) permits. Finally, the uses are allowed subject to the additional limitations and conditions of sections 4 to 7 of SB 212A, which are described below. The uses must meet all of the applicable requirements in order to be allowed under the new subsections (1)(cc) or (1)(z).

If the use(s) do not meet these requirements, they may be allowed under other provisions of ORS ch. 215, including (but not necessarily limited to) ORS 215.213(1)(d) and 215.283(1)(d) (as utility facilities necessary for public service), or under ORS 215.203 (as a farm use). For example, the land application of water from a confined animal feeding operation is a farm use allowed under ORS 215.203. Section 7 of the House Amendments further clarifies that this legislation is not intended to alter whether a particular use that does not qualify under this legislation is or is not a farm use under ORS 215.203.

C. SB 212A is intended to apply prospectively, to any land use decision required for new facilities carrying out land application, or uses involving land application. New facilities or uses involving the land application of reclaimed water, agricultural or industrial process water, or biosolids, usually will require a land use decision in most, if not all, cases in order to determine whether the proposed use under the approved facility or use qualifies under this Act. DEQ's State Agency Coordination (SAC) Program and OAR ch. 340, div. 18, require a land use compatibility statement for new licenses, permits and certain other approvals. As described in the decisions of the Oregon Court of Appeals and the Oregon Land Use Board of Appeals in *Friends of the Creek v. Jackson County*, ___ Or Luba ___ (slip op. No. 98-158, 8/31/99), affirmed, 165 Or App 138 (2000), determining whether this type of use qualifies as a farm use, as a utility facility necessary for public service, or (now) as a use allowed under ORS 215.213(1)(cc) or 215.283(1)(z) will usually require “* * * interpretation or the exercise of policy or legal judgment.” For similar reasons, the determination of whether the facility and/or use qualifies under this Act also will in most, if not all, cases usually constitute a “permit,” for purposes of ORS 215.402(4), requiring notice and an opportunity for a local

Report to the Legislature

hearing under ORS 215.416. Nothing in this legislation is intended to alter DEQ's SAC Program or to require amendment of OAR ch. 340, div. 18, regarding when a land use compatibility statement is required by DEQ.

This legislation also is intended to apply to the renewal or modification of licenses, permits and certain other approvals by DEQ, where a land use compatibility statement is required under OAR ch. 340, div. 18 and/or under DEQ's SAC Program. However, it also is intended that the nonconforming use status of existing land application facilities be preserved, as provided for in ORS 215.130 and local ordinances. As a result, in cases where the facilities are not altered, or are altered in a manner that is within the standards set forth in ORS 215.130(9) and (10), it is intended that the entity have the right to continue the use without complying with this Act. Where, for whatever reason, an existing land application facility or use does not meet the requirements of a non-conforming use, it is intended that this Act apply to any land use decision concerning the facility or use. Nothing in this legislation is intended to alter DEQ's SAC Program or to require amendment of OAR ch. 340, div. 18, regarding when a land use compatibility statement is required by DEQ.

Section 4

A. Subsection (1)(a) requires, as a condition to the uses allowed under ORS 215.213(cc) or 215.283(z), that DEQ make the required determination. This determination does not have to be made at the time (or before) any land use decision regarding the use is made. Rather, it is intended as a condition of the use that may be met following any land use review.

Subsection (1)(b) is intended to make it clear that a use that qualifies under this Act is not also subject to other provisions of the listed statutes. This clarification is added in response to the decision of the Oregon Land Use Board of Appeals in *Cox v. Polk County*, __ Or LUBA __ (slip op. No. 2000-030, 11/2/2000), where the Board held that land application facilities may fall under more than one category of the uses allowed under ORS 215.203, 215.213 and 215.283.

B. Subsection (3) requires a process for consideration of alternatives. As noted above, DEQ's SAC program requires the applicant for a license, permit or other approval for land application to obtain a land use compatibility statement for a new land application facility, and under certain circumstances for an existing one that is being substantially modified. The requirement for a land use compatibility statement from the county will, in most if not all cases, normally trigger a land use decision, requiring notice and an opportunity for comment or hearing. Subsection (3) is intended to provide persons interested in a proposal for a new land application operation, or a substantial modification to an existing one, an opportunity to comment on possible alternatives to the proposal. The applicant is required to consider such comments and explain in writing how it considered them. The term "consider" was chosen carefully by the coalition, and is intended to require a *process* for consideration and comment, rather than to create a substantive standard of review. In other words, as long as the applicant states in writing how the identified alternatives were considered and explains why they were not utilized (if they were not), nothing more is required, and the Land Use Board of Appeals and the courts are not authorized by this subsection to "second-guess" whether the applicant's decision was right or wrong.

C. Subsection (4) specifies uses related to the land application that are included in the new uses allowed. First, the language is intended to clarify that the treatment of reclaimed water, process water, or biosolids that results from the uptake of nutrients in plants is part of the allowed use. Other types of treatment not involving the interaction of pollutants with vegetation and soils, are not included in the authorized use. However, it is recognized that changes in the biological or chemical make up of the reclaimed water, agricultural or industrial process water or biosolids do occur in the normal course of transportation or storage of the reclaimed water, agricultural or industrial process water or biosolids prior to land application. So long as the reclaimed water, agricultural or industrial process water, or biosolids meets DEQ standards for land application at the time of transportation to the tract where land application or temporary storage will occur, such incidental changes in the biological or chemical make up of the reclaimed water, agricultural or industrial process water, or biosolids are allowed. In contrast, treatment resulting from processes other than land application or incidental changes during transportation or storage is not allowed under this Act (it may be allowed under other provisions of law).

Report to the Legislature

Other facilities, equipment or uses on the same tract where the land application occurs are included in the allowed use if they are accessory to and reasonably needed for land application to occur on the subject tract. Facilities, equipment and uses are accessory to land application if they are secondary or subordinate to the primary function of the use (land application). Thus, for instance, a storage pond and piping on the tract are allowed if their size is reasonable in relation to the acreage of land application and given the location of the facility in terms of how often or what period of time the land application is allowed. Similarly, pumping facilities are generally allowed as accessory uses. In contrast, a pond used primarily for the treatment of municipal sewage through evaporation, resulting in solids that are then land applied, would not be allowed (maintenance of storage ponds to clear out the build-up of solids incidental to the storage of reclaimed water prior to land application would be allowed). A pond used for treatment, rather than for storage prior to land application, would be for treatment of reclaimed wastewater through a method other than land application. Facilities, equipment and uses are reasonably necessary for land application to occur if it is shown that they are normally a component of a land application system.

D. Subsection (5) describes uses not authorized by this Act. This is intended to clarify that treatment of reclaimed water or biosolids by means other than land application is not allowed under this Act (it may be allowed under other provisions of law, including but not limited to ORS 215.213(1)(d) and 215.283(1)(d) as a utility facility. Use of odor agents, or agents to control algae in storage ponds, like periodic clean-out of solids as part of routine maintenance, is not considered treatment.

Section 5

Under this section, as long as biosolids are transported by vehicle to the tract where land application will occur, both the transportation and the land application are allowed outright if done under a license, permit or approval issued by DEQ. the use of vehicles to transport biosolids from a treatment facility to lands where the biosolids will be land-applied is allowed. In addition, this section provides that the approval of this use is not a permit for purposes of ORS 215.204(4) or a land use decision under ORS 197.015, and therefore does not require notice or an opportunity for comment or hearing. This particular use is a routine practice that is carried out widely just as is the agricultural practice of using fertilizer. The applications tend to be for short time periods, and to change in location often. As a result, it is not practicable to provide notice and an opportunity for comment.

Section 8

The goal of the study is to gather readily available existing reports, data, and technical or scientific information regarding the environmental benefits and impacts of land application of reclaimed water, agricultural or industrial process water, or biosolids in Oregon. The report will also describe existing state programs involving the land application of reclaimed water, agricultural or industrial process water, or biosolids.

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Report to the Legislature

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