

**AGENDA**  
LACEY PLANNING COMMISSION MEETING  
Tuesday, March 3, 2015 – 7:00 p.m.  
Lacey City Hall Council Chambers, 420 College St. SE

**Call to Order:** 7:00 p.m.

- A. Roll Call
- B. Approval of Agenda & Consent Agenda Items\*  
Approval of the February 17, 2015, Planning Commission Meeting Minutes

\*Items listed under the consent agenda are considered to be routine and will be enacted by one motion and one vote. There will be no separate discussion of these items. If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

**Public Comments:** 7:01 p.m.

**Commission Members Reports:** 7:03 p.m.

**Director's Report:** 7:05 p.m.

**New Business:** 7:10 p.m.

**Economic Development Update: George Smith, Economic Development Coordinator.** The Planning Commission will be briefed on the status of current economic development efforts in Lacey.

**Environmental Protection and Resource Conservation Element: Christy Osborn, Associate Planner.** The Planning Commission will review the draft Environmental Protection and Resource Conservation Element which is among the series of various elements that are being updated to comply with the 2016 GMA compliance deadline.

**Communications and Announcements:** 8:55 p.m.

**Next Meeting:** March 17, 2015.

**Adjournment:** 9:00 p.m.

## MINUTES

Lacey Planning Commission Meeting  
Tuesday, February 17, 2015 – 7:00 p.m.  
Lacey City Hall Council Chambers, 420 College Street SE

Meeting was called to order at 7:00 p.m. by Gail Madden.

Planning Commission members present: Gail Madden, Carolyn Cox, Cathy Murcia, Mike Beehler, Jason Gordon, Sharon Kophs, Carolyn St. Claire, and Paul Enns. Staff present: Ryan Andrews, Rick Walk, Christy Osborn, and Leah Bender. Also present: Graeme Sackrison.

Gail Madden noted a quorum present.

**Carolyn Cox made a motion, seconded by Cathy Murcia, to approve the agenda for tonight's meeting. All were in favor, the motion carried. Paul Enns made a motion, seconded by Carolyn St. Claire, to approve the minutes of the February 3, 2015, meeting. All were in favor, the motion carried.**

1. **Public Comments:** Graeme Sackrison informed Planning Commission that he is with the Lacey Chamber of Commerce business economic development group and will be attending Planning Commission meetings regularly and would like to work with the Commission on economic development matters.
2. **Commission Member's Report:**
  - Carolyn Cox attended the last Council meeting and reported that Council approved the tree ordinance with a placeholder on street tree responsibility to be discussed at the retreat. Council also approved the sign ordinance and gave kudos to staff, the Sign Committee, and the Planning Commission.
3. **Director's Report:**
  - Rick Walk noted that staff will work with the Chamber to create a best practices brochure regarding the new sign ordinance.
4. **New Business:**

**Woodland District Hybrid Form Based Code Update:**

  - Ryan Andrews gave some background information and went over the time line for the update.
  - Ryan gave a PowerPoint presentation on the Urban Economics and Development Feasibility interim draft and the Technical Team Meeting 2 Update.
  - Ryan went over the upcoming charrette schedule and invited Commissioners to attend the weeklong event, and stressed the importance of attending the public presentation on March 26.
  - Ryan noted that there will be two more technical team meetings to formulate the code and then the code will be brought to Planning Commission for review. The update should be completed by October 2015.
5. **Old Business:**

**Land Use Element Visioning Discussion:**

  - Ryan reviewed the discussion from January 20 and gave a PowerPoint presentation outlining goals and policies staff have developed:
    - Encourage density, efficient provision of services, and infill within city limits; development within UGA should meet the City's vision for diversity of housing.
      - Consider raising minimum density requirements. Require all new developments to be served by sewer within UGA. Require failed septic systems to connect to sewer within certain distance of existing sewer line. Areas of the UGA should be designated as "urban holding areas" that won't be developed until sewer is available.
    - City should strategically pursue annexations that provide for benefits, are presently provided with city services, and protect groundwater resources.
      - Analyze future potential annexation areas and prioritize accordingly. Annexation applications should include full analysis of each area. Annexation should be approved for properties on sewer or once developed, served by sewer. Priority areas for annexation should be contiguous to existing city limits, developed consistent with city standards, and are connected to sewer.
    - Infill areas should be primary areas where growth within city limits and UGA are focused.
      - Infill and redevelopment should be prioritized around existing neighborhood centers, recognized nodes, and urban corridors in areas served by city utilities and transit. Consider incentivizing development in these areas.

- Ensure diverse employment opportunities in Lacey so residents can live, shop, work, and play in close proximity.
  - Develop and implement strategic goals and plans that support/promote diverse employment opportunities. Work with providers of higher education to ensure education programs match in-demand skills. Work with JBLM to ensure that housing, businesses, and recreation needs of those associated with the base are being met.
- 6. **Communications and Announcements:** Rick asked Commissioners to email him regarding their attendance at the upcoming joint worksession on Thursday, February 19.
- 7. **Next meeting:** March 3, 2015.
- 8. **Adjournment:** 8:35 p.m.



## PLANNING COMMISSION STAFF REPORT

March 3, 2015

**SUBJECT:** 2016 Comprehensive Plan Update: Environmental Protection and Resource Conservation Element Review

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**RECOMMENDATION:** Review proposed content of the Draft Environmental Protection and Resource Conservation Element of the Comprehensive Plan.

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**TO:** Lacey Planning Commission

**STAFF CONTACTS:** Rick Walk, AICP, Community Development Director   
Christy Osborn, Associate Planner 

**ATTACHMENT(S):** 1. Draft Environmental Protection and Resource Conservation Element

**PRIOR COUNCIL/  
COMMISSION/  
COMMITTEE REVIEW:**

The Draft Environmental Protection and Resource Conservation Element has not been previously reviewed.

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### BACKGROUND:

The Planning Commission is in the process of reviewing proposed changes to the Draft Comprehensive Plan for the 2016 update process. The update efforts include drafting and updating various elements of the Plan. Staff is working with the Planning Commission via a series of work sessions and public hearings for the timely completion of the Plan.

Planning staff is in the process of updating and revising the Environmental Protection and Resource Conservation Plan. This plan was adopted in 1992 to address the requirements of the Growth Management Act to designate and protect resource lands and critical areas. The plan was crafted to include contents of both the background information and goals and policies of the Comprehensive Plan and the applicable development regulations that were adopted. Subsequent revisions to development regulations have been completed since the original adoption of the Environmental Protection and Resource Conservation Plan and codified in the Lacey Municipal Code. The comprehensive plan portions of the document applicable to resource lands and critical areas have not been updated since 1992.

The contents of the plan have been separated to allow for the planning portions of the document to function as an element of the Comprehensive Plan and the development regulations to be included in the municipal code. The proposed updates to this element were not included as part of the original content in the draft Comprehensive Plan that was included

in the first phase of the Envision Lacey process, thus this element has not been previously reviewed.

A draft Environmental Protection and Resource Conservation Plan element is attached for your review. The content provides an overview of resource lands and critical areas within the city's urban growth boundary, goals and policies and future implementation measures. The proposed content of this element has been revised to be consistent with the new format previously agreed to by the Planning Commission. There is not a strikethrough version of this draft due to reformatting and proposed changes.

Once the Planning Commission has completed their review of the draft utilities element, additional community outreach and public comment will occur prior to the final adoption process.

**RECOMMENDATION:**

Request the Planning Commission review draft content of the Environmental Protection and Resource Conservation Plan Element of the Comprehensive Plan and provide input and feedback.

# Environmental Protection and Resource Conservation Element

Community Vision - To preserve and enhance the natural environment

## Introduction

The quality of life in the Pacific Northwest is often equated with the quality and richness of our natural environment. Protecting the environment depends on the community taking coordinated actions to minimize harmful impacts and enhancing the environment. Protecting the environmental resources in our community not only promotes a high quality of life but also encourages private investment in the community.

As the city matures and additional growth occurs, available green-field areas will become limited and available land supplies will increasingly contain environmentally sensitive areas. Urban environmental concerns will continue to be a priority for the community. Public investment in the urban environment; efficient use of land supply and resources; enhancement of the urban ecosystem; and minimizing adverse environmental impacts will assist in nurturing a healthy, sustainable environment.

The City of Lacey has been a leader in supporting efforts to protect and improve the environment while balancing the numerous goals and policies adopted by the City to help achieve its vision for the future. Environmental stewardship is an integrated part of the city's philosophy. Through policy, incentives, and regulations, the city seeks to maintain a healthy, sustainable urban environment, one that meets the needs of today without conceding the needs of future generations. Over time, the City's environmental strategy is anticipated to produce incremental and cumulative improvements to the functions and values of critical areas and promote sustainable ecosystems within the context of urban development constraints. Lacey weighs the relationships of the various elements of the urban environment in its decision making process.

The Environmental Protection and Resource Conservation Element provides the policy framework that guides implementation measures for protecting and improving Lacey's natural environment. The topics discussed in this element include: Natural Resources Conservation, Environmental Protection Areas, Habitat Conservation Areas, Shoreline Master Program, and Environmental Policy.

## **NATURAL RESOURCES CONSERVATION**

### **Overview**

The Growth Management Act requires jurisdictions to prevent urban conversion of agricultural, timber, and mineral resource lands of long-term commercial significance. In general, the guidelines for the classification and designation of natural resource lands of long-term significance indicate that these resource lands should be located beyond the boundaries of urban growth areas. Local jurisdictions are instructed to avoid including resource lands in urban growth areas because the designated purposes of these lands are incompatible with urban densities. However, local jurisdictions have been given guidelines to allow for existing and ongoing resource management operations of long-term significance to continue.

### **Agricultural Lands**

#### **Introduction**

The conservation and protection of agricultural lands has been a long standing priority in Washington State due to the economic significance it plays in our economy as a whole and the ability to provide health food choices as an important public health issue. As such, the designation of agricultural lands within an urban growth area poses significant conflicts due to the proximity of urban development and development pressure due to higher land values. The primary intent of these urban areas is to provide for urban densities with urban services and to allow for the transitioning of properties to urban use.

#### **Agricultural Lands of Long-Term Commercial Significance**

The Growth Management Act recognizes the importance of agricultural lands to the State and nation and the conflicts that can arise between urban and agricultural uses with unplanned growth. The Act requires local jurisdictions to identify and conserve agricultural lands of long term significance as part of the comprehensive planning process. The Act also recognizes that agricultural lands of long term commercial significance should not be designated within urban growth areas unless a transfer or purchase of development rights has been enacted by the county and other designation guidelines could be met.

There are no properties designated as agricultural lands of long-term commercial significance in the current city limits or Lacey urban growth area. An analysis was completed that concluded that there was no property which should be classified as long term prime farm land. The criteria used to formulate this conclusion included: the availability of public facilities and services; tax status; relationship to urban growth boundary; predominant parcel size; intensity and land use settlement patterns; land values under alternative uses; and prime agricultural soils.

### Local Regulatory Framework

There are four properties in the unincorporated portion of the growth area that are designated as Agricultural. The Agricultural (A) District designation is intended to serve as a place holder for existing agricultural properties located in the UGA pending the need for transition to other urban uses. This designation provides for the production of crops and livestock on areas of agricultural land with greater than twenty contiguous acres.

The City of Lacey works in conjunction with Thurston County to implement a Transfer of Development Rights (TDR) program for agricultural lands. In 1995, the first TDR program in the state was established in Thurston County to allow owners of property designated Long-Term Agriculture (LTA) in rural areas to gain credit for unused development rights. These development rights can be sold and transferred to properties in an urban area to allow increased densities in specific areas. The goal of the program is to preserve farmland while allowing owners to realize the economic value of their land's development potential. In the City of Lacey and its unincorporated UGA there are four zones that are receiving areas for TDR credits, they are the Mixed Use Moderate Density Corridor (MMDM), Mixed Use High Density Corridor (MHDC), Moderate Density Residential Zone (MD) and the High Density Residential Zone (HD). This program has not been utilized in Lacey's UGA since the establishment of the TDR program due to unfavorable market conditions, including the desire for increased densities. The program has been employed in other areas of the county, primarily transferring rights from south Thurston County to the City of Tumwater.

In 2011, the City adopted regulations to accommodate urban agricultural activities. The intent of the Urban Agriculture zone is to develop opportunities for a range of agricultural activities at a level and intensity that is compatible with Lacey's neighborhoods. The range of activities and use are dependent on lot size and design standards and range from personal use on individual single family lots or common property for community agricultural use. Small commercial urban farms are provided for as well. Urban agricultural activities managed in a responsible way, with thoughtful consideration to compatibility and urban density can provide many benefits. These benefits include providing fresh produce, additional food choices, economic opportunities, a more sustainable lifestyle, and rich and varied neighborhoods.

## Urban Forest Resources

### Introduction

Forest lands are an important resource for Washington State both in terms of economics and in terms of environmental protection. From an environmental perspective, proper management of forested areas is important to protect wildlife habitat, provide open space, reduce the potential for erosion, storm and flood damage, protection of water quality and the production of oxygen from carbon dioxide.

### Commercial Forest Lands

The State Growth Management Act requires cities and counties to classify and conserve resource lands, including forest lands. Guidelines to designate forest lands of long-term commercial significance recognize that these lands are located outside urban areas, suburban areas, and rural settlements. Long-term forest lands are lands primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for production. Historically, there have been conflicts between harvesting of trees for commercial purposes and preservation of trees for other benefits. Commercial timber harvesting considerations and urban development patterns tend to conflict. Based on the designation guidelines, there are no designated forest lands of long-term commercial significance in Lacey's UGA.

### Urban Forest Management Plan

The City of Lacey has been regulating the protection of trees and vegetation since the mid-1970's. Policy direction for protecting trees, vegetation, and landscape were subsequently directed by the adoption in 1985 of *City of Lacey Urban Beautification Project* and the *Environmental Protection and Resource Conservation Plan* in 1994.

During the early 2000's, an accelerated rate of private property development began to occur in areas with second growth forest species on site and appeared heavily forested. Since the intensity of development was causing nearly all the trees to be removed from development sites, the City started receiving more complaints from citizens about removal of trees. In 2006, the *Lacey Urban Forestry Plan* was adopted consistent with the vision Council had for balancing intense urban development with maintaining a forested character the City currently possesses.

An update to the *Lacey Urban Forestry Plan* was recently adopted by the Council with the goal of updating the plan every five years for needed revisions to technical data as well as addressing design and administration issues associated with implementation of the plan. The overall goal of the plan is to manage city trees to improve canopy

cover and the aesthetic and physical benefits of trees to a community, while protecting infrastructure from tree damage. The management plan provides detailed goal and policies and makes recommendations for preservation, protection, restoration, species selection, design, planting, and citizen involvement.

## **Mineral Resource Lands**

### **Introduction**

The GMA recognizes the importance of mineral resource lands that contain gravel, sand, and other valuable metallic resources. The GMA requires local jurisdictions to designate mineral resource lands that are not already characterized by urban growth and that have long-term commercial significance for extraction of minerals. Mineral resources are in fixed supply and occur in very specific areas. Maintaining the ability to extract these materials for a variety of uses such as construction of roadways, the production of other materials, landscaping materials, and water filtration is a necessity. The recovering and processing of these resources can be costly depending on the location and environmental and land use protections put in place.

The consideration of designating mineral resource lands in the UGA is an exception to natural resource lands typically being located outside of the boundary. However, mineral extraction activities are typically associated with numerous nuisance characteristics that can have impacts on activities normally associated with urbanized areas. Residential, commercial, and other light industrial activities can have significant land use conflicts with mineral extraction activities. Any designation of new mineral resource lands in the UGA would be required to go through a thorough analysis to determine if significant cost savings can be obtained from using minerals close to their source; the potential for reusing the mined land for other purposes once mining is complete; potential conflicts and impacts to adjacent urbanized areas; and impacts to designated critical areas. Designating new mineral resource sites within the Lacey UGA would be difficult based on the existing urban development pattern in place.

### **Designation of Mineral Resource Lands**

The Department of Natural Resource (DNR) maintains maps and records of all existing surface mining permits. Local governments must approve mine sites and the subsequent use of the site. The DNR is responsible for ensuring that reclamation follows completion of surface and underground mining. The DNR has the exclusive authority to regulate mine reclamation and approve reclamation plans. All permitted sites are required to have reclamation plans. Based on records in the DNR database, there are currently four active surface mining sites within Lacey and Lacey's UGA. Table \_\_\_\_ lists these know sites.

TABLE \_\_\_\_

<b>MINERAL RESOURCE SITES</b>				
10958-Torden Thomsen	Steilacoom Mine	S18,T18,R01E (In UGA)	13 acres	Sand/Gravel
12168-Miles Sand & Gravel	South Pit	S10,T18,R01W (Inside City)	72.5 acres	Sand/Gravel
10385-Miles Sand & Gravel	North Pit	S10,T18,R01W (Inside City)	65 acres	Sand/Gravel
10938-Lakeside Industries	Lacey Pit	S9&10,T18,R01W (Inside City)	12 acres	Sand/Gravel

Three of the surface mining sites are located within city limits and one is located in the unincorporated portion of the UGA. The mineral resource permitted to be extracted from all sites is sand and gravel.

The lifetime of a mine is variable and dependent on market conditions, mining activity may increase or decrease at any given time. The DNR inspects mining sites every one to two years to ensure that the site's activities have remained within the area and depth allowed by the permit and to oversee reclamation of mined areas.

**Development Standards**

Development regulations have been put in place in the Lacey Municipal Code to acknowledge the existence of existing mineral extraction activities and provide for the future use of these sites once these sites are no longer mined. These provisions are also intended to protect adjacent areas from adverse effects of extraction activities as well as protect the resource site from conflicting uses. The Steilacoom Mine and the Lacey Pit are located in the Mineral Extraction (ME) zone which allows for activities related to mineral extraction. This designation will remain in place until such time as these properties are ready to transition from mineral resource use. The Miles Sand and Gravel North Pit is designated as Hawks Prairie Business District-Business Commercial; and the Miles Sand and Gravel South Pit is designated as Central Business District 6.

## **ENVIRONMENTAL PROTECTION AREAS**

### **Introduction**

The Growth Management Act requires cities and counties to adopt regulations for the protection of environmentally critical areas, which include wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas. These regulations are required to be periodically reviewed every eight years and brought up to date with any changes in the GMA and other relevant changes. Goals and policies contained in the plan are used to inform the content of development regulations to reduce the potential for impacts on the environment from changes in land use and development. Detailed analysis on impacts of future development is evaluated on a project basis through implementation of the Wetland Protection regulations and the State Environmental Policy Act (SEPA) during the development review process.

### **Best Available Science**

GMA requires jurisdictions to use Best Available Science (BAS) in revising or adopting policies and regulations related to critical areas to protect the functions and values of these areas. State agencies have published suggested guidance materials to assist in identifying BAS for critical areas protection. In addition, other scientific information that is directly applicable to the community is used. Utilization of BAS is also central to recovery efforts required under the Endangered Species Act (ESA). The process to ascertain and identify pertinent BAS for the community assists in policy and regulatory decision-making.

Lacey's natural environment is composed of a variety of soils, waterways, vegetation, and geologic features. Some areas of the City have physical features that are compatible with development of variable intensities while other areas have challenges or are incompatible. The City regulates land use and development activities to protect certain critical areas as well as protect the public health, safety, and welfare.

## **Wetlands**

### **Introduction**

Wetlands are designated critical areas that are an integral feature of the City's urban landscape and local hydrologic cycle. In their natural state, wetlands provide many valuable social and ecological services such as controlling flooding and stormwater runoff; protecting water resources; providing areas for ground water recharge; preventing shoreline erosion; providing habitat areas for many species of fish, wildlife, and vegetation; and providing open space areas.

Wetlands and their buffer areas are valuable natural resources with development constraints due to flooding, erosion, soil liquefaction potential, and septic disposal limitations. Buffer areas surrounding wetlands are essential to maintain and protect wetland functions and values. Urbanization in the watershed diminishes the function of individual wetlands. Considerable acreage of these natural resources has been lost or degraded by draining, filling, excavating, building, or other acts incompatible with the stewardship of such areas.

Each wetland provides various beneficial purposes dependent on the wetland type functions. Larger wetlands and those hydrologically associated with lakes and streams have comparatively more important function in the watershed than smaller, isolated wetlands.

### **Wetland Protection Measures**

To ensure the protection of these areas, the City has adopted regulations to avoid or minimize damage to wetland areas. These protections require activities not dependent upon a wetland location to be located away from wetlands and their associated buffer areas. The stated purpose of the Wetlands Protection ordinance is to achieve no net loss of wetlands by requiring restoration or enhancement of degraded wetlands or creation of new wetlands to offset losses that are unavoidable. The long-term goal of the City is to increase the quantity and quality of Washington's wetland resource base. The provisions for wetlands are reviewed and updated as required as relevant data and information becomes available.

Three mapping sources are utilized to show the appropriate delineations of wetland areas within the City of Lacey. The City Land Use and Zoning Map has an overlay zone showing environmentally sensitive areas; the National Wetlands Inventory maps; and the Department of Natural Resources Water Typing maps. These maps are used as indicators of possible wetland sites. Precise designation and delineation of wetlands must rely on field surveys at the time of review of individual sites initiated by development proposals.

### **Woodland Creek Basin**

Woodland Creek serves as the primary natural drainage way through Lacey that is the culmination of a chain of connected lakes that flow from one to the other through wetlands. The Woodland Creek drainage system discharges into Puget Sound at Henderson Inlet. Woodland Creek is the largest freshwater tributary draining into Henderson Inlet and has a total length of approximately eleven miles. Several springs and smaller creeks feed into Woodland Creek.

The creek's water quality is rated as "fair" due largely to issues with fecal coliform bacteria. Sources of these bacteria are from septic systems, animal waste, and other pollutants such as fertilizer. The creek is on the Department of Ecology's 303d list of impaired waters for water quality standards for fecal coliform, dissolved oxygen, and temperature. Ongoing measures are being implemented to improve the water quality of the creek.

In 2006, Lacey joined with Thurston County and LOTT Wastewater Alliance to commission a study to estimate the amount of fecal coliform bacteria and nitrate pollution coming from various sources in an area along Woodland Creek and to identify feasible options for reducing the pollution. The City and Thurston County have been pursuing projects based on this recommendation including Woodland Creek Estates sanitary sewer project, Tanglewilde stormwater project, and the Aquifer Recharge Enhancement Area project in Woodland Creek Community Park.

Provisions have been included in the Lacey Historical Neighborhood zoning district that requires development and uses bordering Woodland Creek maintain a two-hundred foot natural buffer from the ordinary high water mark on both sides of the creek. Uses in the buffer area are limited to natural open spaces, trails, passive recreational activities, streets, and utility services. Pretreatment of stormwater runoff directed to the creek is also required to mitigate water quality impacts. Due to the high level of concern with water quality issues in the Woodland Creek Basin, this buffer area requirement should be extended to other zones bordering the creek.

## **Flood Hazard Protection**

### **Introduction**

Flood plains and other areas subject to flooding perform important hydrologic functions and may present a risk to persons or property. The City of Lacey's streams and lakes are subject to flooding during periods of heavy rainfall. Protection of life and property during flood events is a critical part of the City's duty to the public's safety.

The Growth Management Act recognizes the impact flooding can have on jurisdictions and requires the classification of such areas and the provision of standards to protect the public safety. Local jurisdictions are required to classify at a minimum the 100-year flood plain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

## Flood Control Regulations

Flood control and floodplain management regulations seek to identify floodplains, develop local controls over land uses in flood prone areas, prepare plans to eliminate or mitigate human health risks and property damage from future floods, and manage flood events as they occur. Many state regulations are based on federal regulations, and many local regulations are based on state and federal regulations. State statutes are periodically amended to strengthen and coordinate flood hazard management activities.

Three principal state statutes address flood hazard management activities:

1. Flood Control by Counties (RCW 86.12) - Originally enacted in 1907, this statute authorized the levy of taxes and eminent domain to control or prevent flood damage. The bill expanded the role of counties in developing and adopting comprehensive flood hazard management plans. While counties are responsible for basin plan management, a participatory process with cities is required.
2. Floodplain Management (RCW 86.16) - This statute integrates local and state regulatory programs to reduce flood damage and protect human health and safety. The state program requires that local flood-prone jurisdictions adopt a flood damage prevention ordinance based on standards in the National Flood Insurance Program (NFIP). State regulations go beyond federal standards by prohibiting new or substantially improved residential construction in designated floodways.
3. State Participation in Flood Control Maintenance (RCW 86.26) - This statute is administered by the state Department of Ecology through the Flood Control Assistance Program (FCAAP). Local governments participating in the NFIP and meeting state requirements are eligible for matching funds for certain facilities and to develop comprehensive flood control management plans.

The City of Lacey has been participating in the flood insurance program since 1980. The City has a flood protection ordinance as a chapter in the Lacey based on the federal NFIP. The basis for establishing areas of special flood hazard are those that are identified by the Federal Insurance Administration in a scientific and engineering report entitled *The Flood Insurance Study for Thurston County, Washington and Incorporated Areas, Oct. 16, 2012*. This report with accompanying flood insurance rate maps (FIRM) is used as the best available information for flood hazard

identification. As new data and information is available, the City works to update these regulations.

## **Critical Aquifer Recharge Areas**

### **Introduction**

Lacey and the Thurston region have done extensive study on identification and protection of underground aquifers located in northern Thurston County due to these aquifers being the sole source of drinking water for over 100,000 people.

Groundwater protection is a particular concern in Thurston County as nearly 100% of the County's domestic, industrial, and agricultural water supplies rely on groundwater. Lacey is a member of the Northern Thurston County Groundwater Advisory Committee, which reports to the Department of Ecology. The committee oversees the development of technical data, the *Northern Thurston County Groundwater Management Plan*, and citizen involvement in ground water protection.

The hydrology of northern Thurston County indicates it is susceptible to contamination. Many of the surface deposits are sands and gravels that water and contaminants can move through easily. The water table is also close to the surface in places. The area of northern Thurston County has been designated as a groundwater management area and includes a total of 232 square miles. The groundwater management area boundaries were set with the goal of protecting the entire groundwater system within the hydrogeologic boundaries of the northern Thurston County region.

According to studies, the groundwater management area contains a fairly distinct and hydraulically isolated mass of groundwater that does not receive water from the Cascade or Olympic Mountains or other distant locations. While streams and lakes provide a significant amount of groundwater recharge, rainfall is by far the primary source of water for the replenishment of the aquifer system.

In some areas there are a few soils and subsurface particles that contaminants can bind to easily. In many areas there are no confining layers between higher and lower aquifers so they are considered vulnerable. The degree of susceptibility varies throughout the groundwater area depending on the geologic characteristics of the sub-area. A contaminate source must be present to pollute groundwater. Once groundwater is contaminated, it is difficult to clean up and the cost may be prohibitive.

### **Aquifer Recharge Areas Classified**

The Growth Management Act requires the classification of recharge areas for aquifers according to the vulnerability of the aquifer. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute contamination that may degrade groundwater, and hydrogeologic conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that degrade ground water and those conditions that do not facilitate digression.

### **Aquifer Recharge Regulations**

Chapter 14.36, Critical Aquifer Recharge Areas Protection contained in the Lacey Municipal Code outlines provisions for the protection of critical aquifer recharge areas and wellhead protection areas. The provisions contained in this chapter will be reviewed and updated based on best available science and data that has become available since its original adoption.

Critical aquifer recharge areas are rated by category based on the soil series listed in the *Thurston County Soil Survey*. The regulations contained in the code apply to aquifer sensitive areas listed as Category I or II or wellhead areas or those areas that meet the stated criteria set forth in the protection measures. Interagency coordination with the Thurston County health officer is completed when an application is submitted requesting authorization of activities within an aquifer sensitive or wellhead protection area.

## **Geologically Hazardous Areas**

### **Introduction**

Geologically hazardous areas are those which are susceptible to erosion, landslides, earthquake and other geological events which pose a threat to public safety. At issue is the proper location and design of commercial, residential and industrial development to remove or reduce incompatibility with underlying geology.

Some geological hazards can be mitigated by proper engineering design or modified construction so that risks to health and safety are acceptable. However, when technology cannot reduce risk to acceptable levels, building in geologically hazardous areas should be avoided.

### Classification of Geologically Sensitive Areas

The GMA recognizes the significant hazard to the public health and safety from geologically hazardous areas. The Act requires jurisdictions to classify and designate geologically hazardous areas, including erosion hazard, landslide hazard, seismic hazard, and areas subject to other geological events.

Chapter 14.37 of the Lacey Municipal Code outlines provisions for Geologically Sensitive Areas Protection. Areas in Lacey that are prone to one or more of the following hazards are defined as geologically hazardous:

- Erosion Hazard Areas
- Landslides Hazard Areas
- Seismic Hazard Areas
- Other geologically hazardous areas not mapped but meet the criteria of geologically sensitive areas such as hillside areas having slopes of fifteen percent or greater.

The City utilizes mapping as a guide to the general location and extent of geologically sensitive areas including *Geologically Sensitive Areas Map*; the *Lacey Urban Growth Area Zoning Map*; and the *Soil Survey of Thurston County Washington*. A qualified professional geotechnical engineer is required to perform geologically sensitive area determinations. Coordination with other agencies such as the U.S. Department of Agriculture Soil Conservation Service and other state and local agencies having jurisdiction or expertise in geologically sensitive areas are asked to review and comment on applicable development proposals.

In conjunction with the Thurston County Department of Emergency Management and twenty six area jurisdictions, the City of Lacey participated in the preparation of the *Natural Hazards Mitigation Plan*, Sept 2009. Risk assessments for major natural hazards that threaten the Thurston Region and effective mitigation strategies are contained in the plan.

### McAllister Springs Geologically Sensitive Area

The McAllister Springs area has been designated as geologically sensitive area. Chapter 16.10 of the Lacey Municipal Code contains measures to protect the McAllister Springs Sensitive Area by provision of sewer and the application of strong water quality standards for residential uses. Residential densities are determined based on sewer availability. Additional environmental performance standards are also required to minimize surface water runoff and diversion, preventing soil erosion, and promoting the aesthetic character of the community.

## **HABITAT CONSERVATION AREAS**

### **Introduction**

Preservation of fish and wildlife habitat is critical to the protection of suitable environments for animal species and in providing a desired quality of life for the community. The conservation of habitat entails active land management for maintaining species within their preferred habitats and accustomed geographic distribution. Isolation of sub-populations creates susceptibility to predation, dislocation, and inadequate food supplies. Habitat protection does not require the protection of all individuals of all species but it does require that land use planning be sensitive to the priority of saving and protecting animal-rich environments.

As salmonid fish species have been deemed to play an extremely important role in the ecosystem and are important cultural resources, jurisdictions must give special consideration to conservation and protection measures necessary to preserve or enhance anadromous fisheries<sup>1</sup>

### **Classified Fish and Wildlife Habitat**

The Growth Management Act requires the classification of seasonal ranges and habitats which are critical to the survival of endangered, threatened, and sensitive species. Habitats and species of local importance, including areas designated as priority habitats or priority species by the Department of Fish and Wildlife.

A listing of fish and wildlife habitat conservation areas to be protected by the state and the Lacey Municipal Code include:

- Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;
- Habitats and species of local importance
- Commercial and recreational shellfish areas;
- Kelp and eelgrass beds, herring and smelt spawning areas;
- Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds;
- Waters of the state, including lakes, rivers, ponds, streams, island waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington;

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<sup>1</sup> RCW 36.70A.172(1)

- Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
- State natural areas preserves and natural resource conservation areas; and
- Land essential for preserving connections between habitat blocks and open spaces.

### **Determination of Habitat Conservation Areas**

All areas of the City meeting the one or more of the designated fish and wildlife habitat conservation areas are subject to the development regulations contained in Chapter 14.33, Habitat Conservation Areas Protection in the Lacey Municipal Code. Several mapping sources can be utilized to determine the approximate location and extent of habitat conservation areas in the city including the Environmental Protection and Resource maps and zoning maps; the Department of Fish and Wildlife Priority Habitat and Species maps; the Department of Natural Resources Official Water Type Reference maps; and Anadromous and Resident Salmonid Distribution maps contained in the Habitat Limiting Factors.

The exact location of habitat conservation areas is required to be determined during the review of development proposals by the performance of a field investigation applying specific habitat or species recommendations of the Department of Fish and Wildlife for the completion of a management plan and a critical areas report.

### **Performance Standards**

The code outlines minimum performance standards for alterations to conservation areas and provides for conditional approvals of activities allowed within or adjacent to a habitat conservation area or its buffers to minimize or mitigate any potential adverse impacts.

Additional performance standards for specific habitats such as endangered, threatened, and sensitive species; anadromous fish; wetland habitats; and riparian habitat areas are also identified.

## **SHORELINE MASTER PROGRAM**

### **Introduction**

The foundation for shoreline management in Washington State is the Shoreline Management Act (RCW 90.58) which was ratified by voters in 1972 based on a citizen initiative submitted to the legislature. The standards for local policies and regulations are embodied in the Shoreline Master Program (SMP) Guidelines for managing, accessing and protecting shorelines. The SMA has three broad policies outlined in state law which includes:

- Protect the environmental resources of state shorelines
- Promote public access and enjoyment opportunities
- Give priority uses that require a shoreline location

Local SMP's are required to be reviewed by the state Department of Ecology to insure compliance with state law.

### **Local Regulatory Framework**

*The City of Lacey Shoreline Master Program*, adopted on September 8, 2011 is the local mechanism for carrying out Shoreline Management Act. The SMP includes goals, polices, and regulations based on shoreline types and uses that is crafted to meet the needs of the City and also meeting state laws and rules. State law has designed a partnership between local jurisdictions and the Department of Ecology as co-regulators of designated shorelines of the state. Lacey's SMP is required to be reviewed at a minimum of every eight years, and if necessary revised for compliance with applicable laws and regulations and the comprehensive plan.

The City has authority over shorelines within its municipal boundaries. Those shorelines within the City of Lacey and its UGA have been inventoried and found to meet criteria for lands within the jurisdiction of the SMP. These shoreline areas are as follows:

#### Marine Waters:

- Nisqually Reach

#### Lakes:

- Chambers Lake
- Hicks Lake
- Long Lake
- Pattison Lake
- Southwick Lake

#### Steams and Floodplains:

- Woodland Creek

The jurisdiction of the master program is defined as lands which extend landward two hundred feet from the ordinary high water mark of "shorelines of the state," which includes all "shorelines" and "shorelines of statewide significance" as defined by state law. These areas are defined as having special economic and environmental value. These areas include marine waters; lakes larger than twenty acres in size; streams

where the mean annual flow is twenty cubic feet per second; all of the 100-year flood plan within the associated shorelands; those wetlands which are in proximity to either influence or are influenced by the stream; and lands within a river delta flood plain not protected from flood waters by flood control devices.

The approximate shoreline jurisdiction and shoreline environment designations are delineated on the City of Lacey Shoreline Master Program Map. For the purposes of coordination of shoreline requirements with general land use regulations and the Comprehensive Plan, the shoreline designations are also shown as an overlay on the Comprehensive Land Use Map and Zoning map.

The SMP contains four different shoreline environment designations, aquatic, natural, urban conservancy, and shoreline residential. These designations are used to differentiate between areas whose features imply differing objectives regarding their use and future development. Each of these designations has a stated purpose, designation criteria, and management policies that are intended to protect and manage the unique characteristics and resources of the different areas.

#### **Goals & Policies (from SMP)**

The goals and policies of an approved SMP are considered to be an element of the City's comprehensive plan. In 2003, the state legislature linked updates to local shoreline plans with the Growth Management Act. The goals and policies contained in the City of Lacey Shoreline Master Program are incorporated by reference into this Comprehensive Plan.

## **ENVIRONMENTAL POLICY**

### **Carbon Reduction and Resiliency (CR<sup>2</sup>)**

The Carbon Reduction and Resiliency Plan provides a road map for Lacey's energy policy and is a progressive program that will be applied in work towards sustainability. The plan sets benchmarks for carbon reduction and looks at sustainability issues. In 2008, the City of Lacey joined Local Governments for Sustainability to reduce greenhouse gas (carbon) emissions and work toward sustainable practices and policies. Lacey's began implementing measures to protect air quality and the environment in 2009 based on the plan. Selecting and prioritizing future measures are intended to take place during the second phase of the Envision Lacey process.