# **Chew It Over**

Persist ... like a beaver.

Cut through challenges associated with land-use planning that affect the wetlands and waterways near you.



- **★** Do you care about wetlands and streams?
- **★** Do you know about land use planning in the Tualatin River Watershed?
- **★** Do you know when and how to get involved?

# **Table of Contents**



Click this icon at the bottom of pages to return Table of Contents

Introduction   Find Resources Here	2
What is a Watershed?	3
The Tualatin River Watershed	4
What is a Stream?	5
What are Wetlands?	6
Waterway Regulation   Land Use Planning in Oregon	7
Citizen Participation Involvement Tips	8
Overview: Regulatory and Non-Regulatory Agencies	14
Regulatory and Non-Regulatory Agencies- Federal Government	15
Regulatory and Non-Regulatory Agencies- State Government	16
Regulatory and Non-Regulatory Agencies- Local Government	20
Non-Profit Agencies and Organizations	22
Education	24
Webliography- links	25
Photo Key   Conclusion	30

#### Find Resources Here...

Use this booklet to assist you in learning about and connecting with watershed land use decisions.

Citizen interest and participation is a respected part of land use planning. It is part of the Oregon statewide land use planning program established by the Oregon State Senate in 1973.

Your input is important.



"If we are to succeed in saving our planet, the battle will be won or lost at the local level."

- Governor Tom McCall

"Citizen involvement" means participation in planning by people who are not professional planners or government officials. It is a process through which everyday people help create local comprehensive plans and land use regulations and use them to answer day-to-day questions about land use.

(p.2; Putting People in Planning: "How-to" run a successful program for citizen involvement.)

The purpose of this reference is to provide a resource tool that includes:

- Relevant vocabulary
- Land use agencies and their roles
- Land Use Planning background
- Involvement Tips
- Who has authority where and when

Included are overviews and website links to agencies and organizations that are involved with regulatory and permitting processes that protect our local wetlands and waterways.

People who live in the Tualatin River watershed are encouraged to be connected and interested in protecting the wetlands and streams that flow through their communities. Discover what these specific waterways are and why they are valuable resources.



As you read, watch for stars. They guide you to information we think is particularly useful and interesting.

Remember, there is an important role for citizen involvement at all levels of the regulatory process.

Ensuring that good decisions are made requires public knowledge and participation. Community input becomes part of the process when individuals like you learn about issues and act.



## What is a watershed?

After it rains or snows, some of the water is absorbed by the ground and plants. People and animals use some. But, what happens to the rest of the moisture?

That's where the job of a watershed fits into nature's scheme. A watershed is comprised of areas of land that cause water to flow downhill into streams, rivers, or lakes. This downward flow occurs on all land masses- whether large or small. Because water cannot travel uphill, all watersheds are determined by the natural land features or topography of the area.



"This is what you should do- Love the Earth and sun and the animals."

That means if you live on one side of a ridge and your neighbor is on the other side, you live in different watersheds. That also means that watersheds vary greatly in size, depending on the highest points surrounding them.

In basic terms, a watershed, or basin, is all the land that drains to the same body of water, such as a lake or river. Smaller watersheds become part of larger watersheds, as streams feed into rivers, and rivers flow into oceans. This means wherever you are and wherever you go, you're in a watershed.

Please click on this link to watch a video that describes watershed concepts.

Video: What is a watershed?

# Why should we care about watersheds?

You are a citizen of a watershed. Your health and the health of your watershed are inseparable. This is because a watershed is an interconnected system of land, water, air, and the life they support—including people and cities. Your everyday actions affect your watershed. When a watershed is unhealthy, everything living in it suffers.

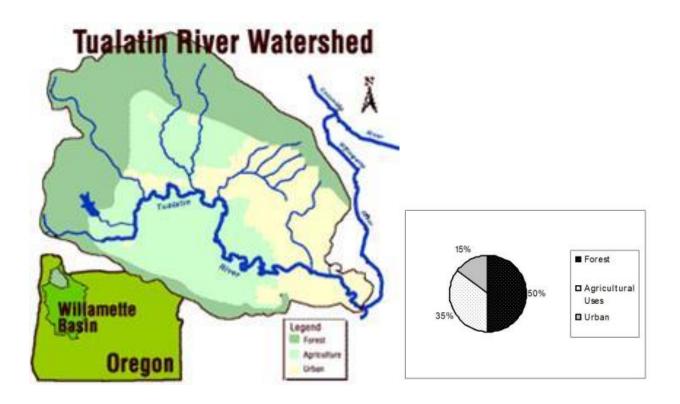
Increased population and increased pollution go hand-in-hand. In urban areas, stormwater runoff is the Number 1 water pollution problem. Developing land typically creates changes in the natural water patterns of an area. As more surfaces lose the ability to absorb water, polluted runoff from rain or snowfall carries oil, fertilizers, pesticides, trash and pet waste into lakes, streams, and the Tualatin River. (source: <u>Environment Education Guide</u>)



## The Tualatin River Watershed

The Tualatin River Watershed is 40 miles long and 25 miles wide. It drains 712 square miles: much of Washington County and portions of Clackamas, Columbia, Multnomah, Tillamook, and Yamhill counties.

The natural topography that determines how water flows into the Tualatin River watershed includes several mountain systems. It is bordered by the Coast Range Mountains to the west, the Tualatin Mountains to the north and east, and the Chehalem-Parrett Mountains to the south.



The Tualatin River watershed supports a wide range of urban, agricultural, and forest activities.

There are many pollution concerns throughout the basin, caused in major part by a rapid increase in population. The population is expected to increase to 700,000 by 2040.

(Resource: Tualatin Soil and Water Conservation District; Know Your Watershed)



## What is a stream?

Stream is a general term for a body of flowing water. In hydrology, the study of water, the term is usually applied to the water flowing in a natural channel as distinct from a man-made canal.

(USGS: Science in Your Watershed)



"Do your little bit of good where you are; it's those little bits of good put together that overwhelm the world."

- Archbishop Desmond Tutu

## **Stream Classification**

There are three classifications of streams: intermittent, perennial, and ephemeral streams; and they all serve different purposes but are equally important to your local ecosystem.

#### 1. Perennial Streams

Water flows in these streams throughout the year. The primary water source can be from ground water, surface water, or a combination of both.

#### 2. Intermittent Streams

Intermittent streams flow for part or most of the year but may carry no water during the dry season.

#### 3. Ephemeral Streams

These streams flow only for a short time, usually after a large storm or snowmelt when there is an increase in water runoff. Ephemeral streams are very small and normally have a dry channel during the year.

(Owner's Manual Natural Resource Stewardship for Homeowner's Associations)

# **Importance of Streams**

Streams, stream banks, and the areas adjacent to them (collectively called the 'riparian area') provide many benefits to both the natural community and to us. The ability to understand streams from natural and human perspectives is important.

Streams, headwaters, and streams that flow only part of the year provide many upstream and downstream benefits. They protect against floods, filter pollutants, recycle potentially-harmful nutrients, and provide food and habitat for many types of fish. These streams also play a critical role in maintaining the quality and supply of our drinking water, ensure a continual flow of water to surface waters, and help recharge underground aquifers. Streams also have economic importance. Protecting streams is important for the economy, particularly for their key role in fishing, hunting, agriculture, and recreation.

(Environmental Protection Agency's Web Archive: Water: Rivers & Streams)



#### What are wetlands?

For regulatory purposes, under the Clean Water Act, the term wetlands are defined-

"...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." From: EPA Regulations listed at 40 CFR 230.3(t)



"Our task must be to free ourselves by widening our circle of compassion to embrace all living creatures and the whole of nature and its beauty."

- Albert Einstein

## How are wetlands identified?

When a land use application is under consideration, it is important to know if a wetland is present. There are many types of wetland. At times, that makes identification tricky.

Three characteristics are used to identify wetlands:

- 1) Vegetation- a presence of wetland plant communities
  - a. There are nearly 5,000 types of wetland plants in the United States.
  - b. These species are known as hydrophytic vegetation.
- 2) Soil- a presence of hydric soils:
  - a. There are about 2,000 named hydric soils.
  - b. These soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of water for long periods during growing season.
- 3) **Hydrology** a presence of water during growing season:
  - There is, however, a lack of both water and waterlogged soils during a part of the growing season in most wetlands.

# **Importance of Wetlands**

Wetlands perform may valuable functions:

- store flood waters
- filter surface water
- replenish ground water that helps to regulate stream temperature and flow
- provide wildlife habitat and fish nurseries
- give open space in urbanizing communities

Wetlands are protected under local, state, and federal regulations. It's important to note that the goal of these regulations is to assure that there is no net loss of wetlands.



Look at this Wetland Fact Sheet to learn more.



## Why Are Activities in Wetlands and Waterways Regulated?

The protection, conservation, and best use of the water resources of Oregon are matters of utmost public importance. Waterways such as streams, rivers, lakes, bays, and estuaries not only provide water for agricultural, domestic, and industrial use, but also provide habitats for aquatic life, avenues for transportation and commerce, and sites for many forms of public recreation. Wetlands provide water storage for flood protection, filtering of pollutants, and habitats for many plant, fish, and wildlife species. Waterways and wetlands are vital to the economy and well-being of Oregonians.

For this reason, we all depend on the health of our wetlands and waterways. To provide for the best possible use of water resources in this state, we must strike a balance between water resource protection and human use. This is the central purpose of Oregon's regulations that govern activities in waterways, wetlands, and their riparian areas.

(Cut from: "Oregon State Water-Related Permits User Guide" 04/29/2018

# **Land Use Planning in Oregon**

Land use planning in Oregon is a topic with history. As you explore the path you will take for citizen involvement, it may interest you to learn a little about the issues from which current day land use regulations take root.



Background articles:

History of Land Use Planning

Land Use and Measure 49

Land Use and Planning in Oregon



A land use library is located on the Metro website: Land Use Library

Are you interested in current land use planning topics?



Use the following links to locate current land use:

Planning resources

**Articles & Stories** 

Maps & Tools

Reports & Publications

Data

Photos & Videos



"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

- Aldo Leopold



## How can I participate in watershed land-use decisions?



We've made some suggestions to get you on your way. Let your interest and situation guide how you blaze your path for citizen involvement.

## **Involvement Tip #1**

To be most effective in exercising your role as a citizen:

- get involved as early as possible in the process
- know the applicable regulations
- be persistent



"The first rule in sustainability is to align with natural forces, or at least not try to defy them."

- Paul Hawken

Some questions to ask could include:

- Is a permit required?
- How far has the development application moved through the process?

If you suspect a project may impact a wetland, your first step is to determine whether a permit is required and if so, how far the development application has moved through the approval process. If you suspect that a wetland is present and may be impacted by a proposed development, you may check with the local planning department, Division of State Lands, and the Army Corps of Engineers.

Activities in and adjacent to wetlands and waterways are regulated. Where the development occurs impacts which regulatory agency or agencies will be involved. This resource includes links to: city, state, federal, metro, and local agencies.

## Tip Support:

How far has the development application moved through the Division of State Lands approval process?

**Check Application or Delineation Status** 

- Check permit and authorization status
  - 1. View application information
  - 2. Provide comments
  - 3. Track status
- Check wetland delineation status
  - 1. View reports
  - 2. Track status

Looking for permits and delineation status reports?

- ★ View Applicant/Application Details
- ★ Read application
- ★ Make comments if document is in Public Review phase



Conduct your own independent assessment of a land use proposal. Land use applications are approved or denied based on the local development code and comprehensive plan regulations- and- must also comply with state and federal rules. To determine if the project complies with all rules and regulation requires research.

## Some questions to ask could include:

- How does the proposed project impact a stream or wetland?
- Does the project comply with the local development code?
- Are there special protections (zoning) that apply to the land in question?



"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make."

- Jane Goodall

The wetland may be listed in the National Wetlands Inventory or Local Wetlands Inventory. Be aware that wetland inventories are sometimes incomplete. Wetlands overlooked by inventories are still subject to regulatory protection. Public involvement in the land use development process can help assure that all wetlands are fully protected in practice.



#### **Tip Support:**

The Oregon Explorer is a helpful tool to learn about natural resource issues-

- **★ Watersheds**
- **★** Wetlands

## Oregon Explorer helps users:

- Learn about natural resources issues in Oregon and the West
- Quickly find, retrieve, integrate, and synthesize well-organized data and information
- Access maps, charts, tables, data collections, photos, videos, reports, and publications in highly interactive and visually engaging formats
- Develop customized data products and tools to support informed decision-making
- Obtain place-based demographic data
- Create shared understanding about Oregon's natural resource and environmental issues, problems and opportunities and build community networks (Cut from site: 04/15/18; <u>About Oregon Explorer</u>)
- · You can also gain greater understanding of Oregon's Statewide Planning by taking online training-
  - ★ Oregon land use planning online training



Understand the timing of in-water work.

Some questions to ask could be:

- Will potential impacts to fish and wildlife be minimized?
- Are the "Oregon Guidelines for Timing of In-Water Work" being followed?



"The activist is not the man who says the river is dirty. The activist is the man who cleans up the river.

- Ross Perot

The guidelines are based on Oregon Department of Fish and Wildlife (ODFW) district fish biologists' recommendations. Primary considerations were given to important fish species including anadromous and other game fish and threatened, endangered, or sensitive species (coded list of species included in the guidelines). Time periods were established to avoid the vulnerable life stages of these fish including migration, spawning, and rearing. The preferred work period applies to listed streams, unlisted upstream tributaries, and associated reservoirs and lakes.



This document gives specific preferred work period times for the Tualatin River and its tributaries.

Oregon Guidelines for Timing of In-Water Work



It is important to raise your concerns when the U.S. Army Corps of Engineers and the Oregon Department of State Lands are reviewing land use applications. These agencies may grant the permit as requested, apply conditions to a project, or deny the permit.



"The greatest threat to our planet is the belief that someone else will save it."

Some questions to ask could be:

- Robert Swan

- If a permit is pending- what suggestions or questions might be made about conditions to the application that would help protect streams and wetlands?
- If the permit has been granted- request a copy of the approved permit. Are conditions described that the developer must meet?
- How can the project be monitored to assure that the conditions are being met once the permit is issued?

Detailed information is readily available about the permitting processes in Oregon. In Oregon, wetlands are regulated through the authority of a handful of federal and state laws and, in some cases, city or county ordinances. If development activities involve earthwork (filling, excavating, ditching, grading, leveling, etc.) within a wetland, state, federal, and/or local permits may be required. Because the regulations are very detailed and change periodically, it is important to contact the agency responsible for implementing the specific wetland regulatory program for more information.

The following resources explain who the permitting agencies are and how permits are processed. Links for federal, state, and local regulatory authorities will get you headed in the right direction.

## **Oregon Department of State Lands document:**

Included is information about: Department of State Lands, Department of Environmental Quality (DEQ), Oregon Department of Fish and Wildlife, Oregon Parks, Oregon Water Resources, Department of Land Conservation and Development, and brief overviews of other related agencies.



<u>State Water-Related Permits User Guide</u>
<u>An Introduction to Water-Related Permits and Reviews Issued by Oregon State Agencies</u>





If you are concerned about a 404- Removal/ Fill Permit Notice

A 404 removal-fill permit is typically required for projects involving 50 cubic yards or more of alteration (removal or fill) of streambed, streambanks, or in wetlands. For projects located in essential salmon habitat waterways or state scenic waterways, any quantity of alteration requires a removal/fill permit. There are four types of removal/fill authorization.



"Let us pledge our lives and fortune to aid the great task of Earth's rejuvenation, and with confidence and faith, each do our part as a trustee of Earth to take charge and take care of our planet."

- John McConnell, the founder of Earth Day

## Some questions to ask could include:

- When is a 404-Removal/fill permit required?
- Which permit authorization is required?
- What activities are exempt from a 404- Removal/Fill Permit?
- Can impact to wetlands be avoided?
- Who do I contact to submit concerns?

## Involvement tip:

#### Learn more-

- Refer to the State Water-Related Permits User Guide section 2.1.2
- Use links in this guide for Oregon Department of Lands (p.p.16-17) and U.S. Army Corps of Engineers (p.15) website resources and contact links.

## Involvement tip:

Determine if impacting wetlands can be avoided. Follow this sequence of steps when considering a 404 Removal/ Fill Permit request:

- 1) Can the applicant **avoid impacts** to wetlands? An applicant must develop an alternatives analysis\* to demonstrate that there is no feasible or practicable upland alternative site.
- 2) Where no practicable upland alternative is possible, the project must **lessen impact** to the greatest degree possible.
- 3) Where unavoidable impacts may be temporary, the applicant must **rehabilitate** the site.
- 4) If impact cannot be avoided, lessened, or rehabilitated, the applicant is required to <u>mitigate</u> for the loss of wetland as prescribed in the regulations to achieve "no net loss."

It is the applicant's responsibility to rebut the presumptions of no upland alternative unless the project is water dependent (e.g. a boat launch).

<sup>\*</sup> Each permit must have at least 3 alternatives that were looked at by the applicant and include an explanation that describes why a particular site location was chosen. This is an important piece in the permit since most applicants either: do not offer alternatives, or the alternatives are not comparable to the site that was selected.



Your Turn  Describe a Tualatin River Watershed concern you have.	Sketch a picture-
What are your questions?	
•	
As you read guide, jot the names of agencies and orga	nizations that will be helpful to you.

# Overview: Who to contact for information and help Regulatory and Non-Regulatory Agencies in the Tualatin Watershed \*

Details about each agency and links to their websites are provided on the following pages in this booklet. You may also use the index to find a specific agency.

## **Federal Regulation**

In many cases, proposed activities in wetlands or waterways in Oregon will additionally require a permit from the federal government under the Clean Water Act (called the "Section 404 permit") or the Rivers and Harbors Act (called the "Section 10 Permit"). The federal permitting program is administered by the U.S. Army Corps of Engineers. Currently, the Oregon Department of State Lands (for the state removal-fill permit) and the U.S. Army Corps of Engineers (for the "Section 404" or "Section 10" permit) use a joint permit application form so that applicants need to fill out just one application to obtain both permits. However, projects require separate authorizations from both agencies before proceeding, and each agency may require additional information through their respective application processing periods.

## **State Regulation**

In Oregon, protecting our natural resources and the benefits they provide us means a variety of permits and reviews from several state agencies may be required for residential, commercial, industrial, or public works projects in wetlands and waterways. The primary goal of these requirements is to avoid and minimize impact to Oregon's waters where possible and compensate (or mitigate) where impacts cannot be avoided. At first glance, the process of identifying and obtaining your state permitting needs for water-related projects looks complicated and difficult to understand. That is why this State Water-Related Permits User Guide was written – to help you understand the state permits needed for your water-related project.

### **Local Regulation**

When planning a project in wetlands or waterways, you should check first with the applicable local planning department to determine what, if any, city, or county regulations apply. Some cities have developed maps that show many of the wetlands and waterways within their community and have developed local ordinances regulating activities in or near those features. Local planning departments may also be able to help you understand the range of state and/or federal permits required for your water-related project.

Be aware if you are planning a project in Clean Water Services' jurisdiction, they will work with you. If your project is in Beaverton, Cornelius, Forest Grove, Hillsboro, Sherwood, Tigard, or Tualatin, you will need to work with your city. The permitting process is intended to be comprehensive, and, depending on project scope, may include review for environmental, sanitary, stormwater and erosion control impacts.

If you are in an unincorporated area, you will need to contact the county where the project is proposed.

State Water-Related Permits User Guide

An Introduction to Water-Related Permits and Reviews Issued by Oregon State Agencies Section 1.3 An Overview of Wetland and Waterway Regulation in Oregon



<sup>\*</sup> Information on this page was included as an introduction to types of agencies involved with wetland and waterway land use planning or regulation. The descriptions were cut from:

## Regulatory and Non-Regulatory Agencies in the Tualatin Watershed

- Agencies are listed in the following order.
- Color-coding will assist you with identifying types of agencies:

Blue	Federal Government Agency
Green	State Government Agency
Purple	Local Government Agency
Pink	Non-profit
Orange	Educational Institution

# U.S. Army Corps of Engineers Portland Division-



## **Key Regulatory Agency**

The Portland District administers one of the largest regulatory permitting programs within the Corps of Engineers, providing for the protection of waters of the United States, including federally delineated wetlands and navigable waters. The Portland District Regulatory Branch has jurisdiction over the state of Oregon, southern Washington ports and restoration projects in the Columbia River estuary funded by the Bonneville Power Administration.

(Cut from source 04/29/18: <u>U.S. Army Corps of Engineers- Regulatory</u>)

This link will land you on the Regulatory page. Some of the topics the menu in the left column will help you locate include:

how to apply for a permit,

- jurisdiction,
- mitigation,
- public notices, and
- permit decisions and appeals.

**US Army Corps of Engineers** 

Regulatory Contact Information: Use the link to access-

Portland District Regulatory Branch

County-by-County map of Regulatory Contacts

**All Regulatory Contact Information** 

Phone: 503-808-4373

Email: PortlandRegulatory@usace.army.mil

To comment by e-mail on the public notices, find the project manager's name in the notice. You can mail written comments to the address included in each public notice.

To be added to Public Notice mailing list, send your email address to the Regulatory Branch. For information on specific counties, list them in your request.

If your email address changes, you will need to notify Corps of Engineers, provide both your old and new email addresses. Incorrect or non-functional email addresses will be deleted from Army Corps' list.



Environmental Protection Agency	Archived Pages- information that is useful, however, no longer updated.
Role of rivers and streams	Rivers & Streams
Description of streams and types of streams	Importance of Streams
Self-paced distance learning. Modules provide instruction that can lead to Watershed Academy Certificate in Introductory Watershed Management	EPA online training for watershed management

## **Department of State Lands**



### **Key Regulatory Agency**

The Oregon Department of State Lands (DSL) is a rich resource for current information about waterways and wetlands. This agency's website is easy to navigate. Use this site to locate articles, maps, reports, data, and publications about waterways, wetlands, permits, regulations, and regulatory agencies.

We have cut and pasted several key pieces of information from the State Department of Lands website to help you understand the scope of regulations and required permits for projects that occur in Oregon waterways and wetlands. The Department of State Lands issues two types of permits and authorizations:

- Removal-fill permits for removal or fill activity in waterways and wetlands
- Proprietary waterway authorizations for use of state-owned waterways

Our guide, Chew It Over: Do You Know What's Happening in the Tualatin River Watershed?, will focus only on the first: Removal-fill permits.

# Removal-fill permits

Oregon's Removal-Fill Law (<u>ORS 196.795-990</u>) requires people who plan to remove or fill material in wetlands or waterways to obtain a permit from the Department of State Lands. This permit is broadly referred to as the "Removal-Fill Permit." The law applies to all landowners, whether private individuals or public agencies. The purpose of the law, enacted in 1967, is to ensure protection and the best use of Oregon's water resources for home, commercial, wildlife habitat, public navigation, fishing, and recreational uses.

In most cases, a permit is required if an activity will involve filling or removing 50 cubic yards or more of material in a wetland or waterway. For activities in state-designated Essential Salmonid Habitat, State Scenic Waterways and compensatory mitigation sites, a permit is required for any amount of removal or fill.



# **Department of State Lands continued** Key Regulatory Agency Removal-Fill Permit Links (abridged list) The Department of State Lands created a concise and informative Removal-Fill brochure. **Removal Fill Brochure** We highly recommend that you access the guide to get an overview of this permit process. A comprehensive guide to use in conjunction with agency regulations and consulting with agency staff. This **Detailed Guide to Removal Fill Permit Process** document is subject to update. If you download this resource, be sure to check back for updates. This page addresses questions about waterways and **Frequently Asked Questions** wetlands. Scroll down to find permit related questions **Regional Coordinator Map**

Oregon has lost many of her natural resources. It's estimated that Oregon's tidal and not-tidal wetlands once covered about 2.3 million acres. Today, there are about 1.4 million acres of wetland. Our State's history of agricultural and urban development has greatly affected the extent and quality of the remaining waters and wetlands. The socioeconomic benefits were good for several generations of Oregonians, but the cost of stream degradation and wetland loss cannot be sustained into the future. Oregon's more recent history recognizes the importance of protecting waters and wetlands. The Department of Lands is dedicated to continued protection, conservation and best use of the water and wetland resources that remain.

**Staff Directory Table** 

In response to Oregon's land use planning goals DSL works with city and county planners when projects are likely to include wetlands and waters. This next collection of links is to give you a place to learn about local wetland planning and inventories.

# Wetland Planning and Conservation Links (abridged list)

Staff Directory for Waterways and Wetlands

Cities and counties are required by statute to check the "Statewide Wetland Inventory, and notify DSL of local applications received for activities that might impact a mapped wetland	Department Regulation of waterways, wetlands, and other waters
Department of State Lands helps you understand what constitutes a wetland in Oregon, how to determine if land you own is a wetland, and what to do if there are when a project is being planned.	Assistance for landowners
Understand why wetlands are important.	The Importance of Wetlands
Staff Directory for Waterways and Wetlands	Regional Coordinator Map  Staff Directory Table



Department of State Lands continued	Key Regulatory Agency
Mitigation and Publications (abridged list)	
Mitigation works to avoid impacts to aquatic resources, minimize magnitude of impacts, repair/restore impacted areas after completion of a project. It also compensates for unavoidable losses. Find out more.	Mitigation  Contact Mitigation Specialists
Publications	Oregon Wetland Monitoring & Assessment Strategy Planning to Work in Wetlands or Waterways?  Statewide Wetlands Inventory FAQ Wetland Planning Guidebook Wetlands in Oregon Wetlands of Conservation Concern

# **Oregon Department of Environmental Quality (DEQ)**

**WATER QUALITY HOME** 

Water, water everywhere, right? It sure seems like it rains a lot here, but only two-and-a-half percent of Oregon is covered with water. And while that may not seem like much, water plays a huge role in the life of every Oregonian.

The Oregon Department of Environmental Quality is responsible for ensuring that all this surface and groundwater water – rivers and streams across the state – is safe and healthy for a variety of uses such as drinking water, recreation, fish habitat and irrigation.

DEQ issues a variety of permits related to keeping Oregon's water clean. Visit this site to learn about Water Quality Permits.

(Cut from source 04/18/18: DEQ Public Service announcement)

Water Quality Permit Home	Water Quality Permits
This is an interesting read about "constructed wetlands" vs "natural wetlands" and how each is viewed in the permitting process.	DEQ Biofilters (Storm water pollution control)



Oregon Department of Fish and Wildlife	Regulating harvest, health, and enhancement of wildlife populations
These rules establish procedures that the Department will use to review and make decisions on applications for in-water blasting activities, including any permit conditions necessary to prevent injury to fish, wildlife, and their habitat.	In-water Blasting Permit Application
The Oregon Department of Fish and Wildlife, (ODFW), under its authority to manage Oregon's fish and wildlife resources has updated the following guidelines for timing of in-water work. The guidelines are to assist the public in minimizing potential impacts to important fish, wildlife and habitat resources.	In-water Timing Guidance
Oregon Conservation Strategy is an overarching state strategy for conserving fish and wildlife. The goals of the Conservation Strategy are to maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, preventing declines of atrisk species, and reversing declines in these resources where possible.	Oregon Conservation Strategy  Conservation Toolbox
(Oregon Conservation Strategy. 2016. Oregon Department of Fish and Wildlife, Salem, Oregon.)	Oregon's Existing Planning and Regulatory Framework

# **Oregon Water Resources Department**

## **Water Resources**

**Oregon Water Resources** 

In December 2017, the Water Resources Commission adopted Oregon's second Integrated Water Resources Strategy, a framework for better understanding and meeting our instream and out-of-stream water needs, including water quantity, water quality, and ecosystem needs. Using a process that involved extensive public outreach, the 2017 Strategy identifies the most critical water-related challenges facing communities throughout Oregon. It offers more than 50 recommendations in 13 issues areas to address these challenges.

Visit the Integrated Water Resources Strategy page to download.

Simple reference for regulatory and nonregulatory programs that influence permitting of projects in wetlands and waterway.

Water-Related Permitting Guide (2012)

## Oregon Watershed Enhancement Board

**Oregon Watershed Enhancement Board** 

The Oregon Watershed Enhancement Board is a state agency that provides grants to help Oregonians take care of local streams, rivers, wetlands, and natural areas. Community members and landowners use scientific criteria to decide jointly what needs to be done to conserve and improve rivers and natural habitat in the places where they live. OWEB grants are funded from the Oregon Lottery, federal dollars, and salmon license plate revenue. The agency is led by a 17-member citizen board drawn from the public at large, tribes, and federal and state natural resource agency boards and commissions. When applying for a grant to conserve and improve rivers and wetlands, be sure to understand what permits will relate to your project.

(Cut from site 04/29/18: Organization)

Watershed Council information, grant resources, data, and map links	Resources and Links
Issued by State & Federal Agencies with a focus on permits for Watershed	A guide to Oregon Permits
Contacts	Regional Program Representatives

# Unincorporated Areas & City Contact Information for Tualatin Watershed-Use the jurisdiction guidelines on the Clean Water Services website:

If you are planning a project in Clean Water Services' jurisdiction, they work with you. Please go to page 22.

However, if your project is in Beaverton, Cornelius, Forest Grove, Hillsboro, Sherwood, Tigard or Tualatin you will need to work with your city.

The permitting process is intended to be comprehensive, and depending on project scope, may include review for environmental, sanitary, stormwater and erosion control impacts.



City Planning	
Beaverton	Sherwood
Cornelius	<u>Tigard</u>
Forest Grove	<u>Tualatin</u>
<u>Hillsboro</u>	

If you are in an unincorporated area, please contact your County.

County Planning	
Clackamas-	Planning and Zoning
Multnomah-	Land Use Planning
Washington County-	Land Development Process
	<u>Brochure</u>



# **County- Citizen Involvement**

# Clackamas County Community Planning Organization

**About the CPO Program** (Clackamas County)

Clackamas County Community Planning Organizations (CPOs) are run by and made up of citizen volunteers - your neighbors and friends who care about livability and growth issues in their communities. CPOs are advisory to the Planning Division, Planning Commission and the Board of County Commissioners on land use matters affecting their communities. The county notifies CPOs of proposed land use actions and legislative changes within or near their boundaries. CPOs may review these applications and recommend approval or denial or provide input and ask questions. (cut from source 09/16/18 Clackamas County CPO)

# **Multnomah County Community Involvement Committee**

Office of Community Involvement (Multnomah County)

The CIC plays a crucial role in bringing community voice into county decision-making. CIC members engage in an ongoing study and discussion of the county's priorities, programs, and procedures. Together, the committee makes recommendations directly to the Board of Commissioners and county departments about opportunities for community engagement and removing barriers to participation. (cut from source 05-01-18: What is the Community Involvement Committee?)

# **Washington County Community Planning Organization**

About the CPO Program (Washington County)

CPOs are organizations led by volunteers elected by members of the communities they serve. CPOs encourage and empower public involvement by providing a place for community members to: Come together to learn about and discuss issues in a comfortable forum. Get unbiased information about issues relating to local and County services for transportation, parks and trails, housing and business developments, public health, safety, emergency planning, schools, libraries, and other matters affecting the livability of their community. Interact with decision makers including local government and agency representatives, elected officials, and community leaders. Engage as a group in an advisory role to the Washington County Board of Commissioners.

(Cut from source 05/01/18: What are CPOs?)



# **Non-Profit Organizations**

### **Clean Water Services**

"We are a water resources management utility that combines science and nature to clean water and return it to the Tualatin River, so it can be used again. We work in partnership with others to safeguard the river's health and vitality, ensure the economic success of our region, and protect public health for nearly 600,000 residents and businesses in urban Washington County."

(Cut from source 04/29/18: About Us)

Type an address to determine CWS or City jurisdictions	Clean Water Services' jurisdiction maps
Comprehensive permitting process	Step by Step Permit Process
Watershed restoration, resource recovery and organizational excellence	Clean Water Institute
Learn more about how CWS protects water resources in the Tualatin River Watershed	One Water
Development Services' responsibilities include reviewing plans, issuing permits and more. Click to learn more.	Permits and Development

# **Land Trusts | Coalition of Oregon Land Trusts**

A land trust or conservancy is typically a nonprofit working with individuals who want to conserve land in their backyard or local community—protecting places like parks, waterways, areas with critical wildlife habitat, community gardens, working farms, restoration projects and more.

The mission of the Coalition of Oregon Land Trusts is to serve and strengthen the land trust community in Oregon.

The Coalition of Oregon Land Trusts (or COLT) is the only association of land trusts in Oregon, where it serves as a statewide service center and the central voice of the land trust community. COLT focuses on improving and advancing land conservation in the state through increased land trust capacity and coverage, engagement of stakeholders, defending and developing new and larger sources of funding, and supportive policies. It represents the land trust community and provides leadership on important initiatives in public policy advocacy, policy implementation decisions, and outreach to public and private stakeholders.

On this website, you can explore the overall benefits of land trusts, learn about Oregon's trusts, consider alternative methods of conservation, and examine the various techniques used to put lands into trust. (Cut from source 09/16/18: <a href="Coalition of Oregon">Coalition of Oregon</a> Land Trusts

**About Land Trusts** 

**Oregon Land Trust Contacts** 



# **Non-Profit Organizations continued**

## **Soil and Water Conservation Districts**

# **Tualatin Soil and Water Conservation District**

**Tualatin Soil and Water Conservation District** 

Conservation is for everyone!

Your Conservation District is here to help conserve, protect, and enhance the natural resources in the Tualatin River Watershed in many ways. Our goal is a clean and healthy watershed that supports all beneficial uses for people, fish, and wildlife; a vibrant economy; and livable communities. (cut from source 05-02-18)

About	About
Streams	<u>Stream</u>
West Multnomah Soil and Water Conservation District	West Multnomah Soil and Water Conservation District

We're here to serve West Multnomah County and Sauvie Island residents with information and assistance on conservation planning, invasive weeds, native plants, livestock management, grant funding, wildlife, healthy woods, habitat restoration, school gardens and other projects for which they need assistance. We look forward to hearing from you! (cut from source 05-02-18: West Multnomah Soil and Water Conservation District)

Excellent how-to resource	Tips for Streamside Landowners in Multnomah	
	County	

# **Tualatin Riverkeepers**

Tualatin Riverkeepers is a community-based organization working to protect and restore Oregon's Tualatin River system. TRK builds watershed stewardship through education, public access to nature, restoration, and advocacy.

TRK takes a proactive approach to advocacy for clean waters, empowers the diversity of stakeholders in the Tualatin river basin to care for our unique river, and educates youth and future activists with creative curriculum inspired by local ecological traditions. We seek partnerships with agencies and landowners throughout the watershed to conserve the lands and biodiversity found within the broader landscape and analyze watershed issues from the floodplain's perspective. As such, we find strength from farmer to ecologist's viewpoints and believe bringing multiple parties together based on shared common ground will enhance sustainable management of the Tualatin watershed.

(cut from source 05/01/18: Tualatin Riverkeepers)

Resource for tips on Wetland Restoration	Restoration Information
--	-------------------------



# **Non-Profit Organizations continued**

## **Tualatin River Watershed Council**

The Tualatin River Watershed Council is a locally organized, voluntary group, whose purpose is to:

- foster better stewardship and understanding of the Tualatin River watershed resources,
- address natural resource issues, and
- ensure watershed health, function, and uses.(cut from source 05-02-18:About Tualatin River Watershed Council)

How to get involved with Tualatin River projects

It is all About the Water

# **The Wetlands Conservancy**

The Wetlands Conservancy (TWC) is the only organization in Oregon dedicated to promoting community and private partnerships to permanently protect and conserve Oregon's greatest wetlands – our most biologically rich and diverse lands.

For more than 30 years, The Wetlands Conservancy has educated and assisted landowners, neighborhood groups, land trusts, and watershed councils on local stewardship to support fish and wildlife, clean water, open space, and people's appreciation of nature.

(Cut from source 05-01-18: About The Nature Conservancy)

**Land Conservation Tools** 

## **Education**

# **Oregon Explorer| Watersheds**

# **Natural Resource Digital Library**

OREGON EXPLORER

The Oregon Explorer uses the power of today's innovative information technology to create a state-of-the-art web accessible natural resources digital library that integrates and provides access to data from state and federal agencies, local governments, university scientists and citizens to support informed decisions and actions by people concerned with natural resources, environment, and communities in Oregon and the West. The Oregon Explorer was initially launched in June 2007 and redesigned in June 2015.

(cut from source 03/31/18: About Oregon Explorer )

Animals and Plants	Climate, Water, and Air	Coast, Ocean, and Marine	Forestry and Agriculture
Land Use and Planning Regulatory Agencies Permits Wetland Regulations	Landscapes and Ecosystems Restoration	People and Communities	



## **Webliography-Links Resource Guide**

#### **Citizen Involvement**

Putting People in Planning

http://www.oregon.gov/lcd/docs/publications/putting the people in planning.pdf

## **City Permitting**

Beaverton

http://www.beavertonoregon.gov/

Cornelius

http://www.ci.cornelius.or.us/

Forest Grove

http://www.forestgrove-or.gov/

Hillsboro

http://www.hillsboro-oregon.gov/

Sherwood

http://www.sherwoodoregon.gov/

Tigard

http://www.tigard-or.gov/

Tualatin

http://www.tualatinoregon.gov/

#### **Clean Water Services**

Clean Water Institute

https://www.cleanwaterservices.org/about-us/clean-water-institute/

Clean Water Services

https://www.cleanwaterservices.org/permits-development/

Clean Water Services' jurisdiction maps

http://cws.maps.arcgis.com/apps/webappviewer/index.html?id=a2a448a5079d4dc18f78383af829f247

One Water

https://www.cleanwaterservices.org/about-us/one-water/

Permits and Development

https://www.cleanwaterservices.org/permits-development/

## **County- Citizen Involvement**

#### **Clackamas County Citizen Participation Organization**

https://www.clackamas.us/community/handbook.html

About the CPO Program (Clackamas County)

https://www.clackamas.us/community/cpoinfo.html

#### **Multnomah County Community Involvement Committee**

https://multco.us/oci/community-involvement-committee-cic?

Office of Community Involvement

https://multco.us/oci

#### **Washington County Citizen Participation Organization**

https://www.co.washington.or.us/cao/cpo/

About the CPO Program (Washington County)

https://www.co.washington.or.us/CAO/CPO/about.cfm



## **County- Planning**

### **Clackamas- Planning and Zoning**

http://www.clackamas.us/planning/

#### **Multnomah-Land Use Planning**

https://multco.us/landuse

#### **Washington-Land Development Process**

https://www.co.washington.or.us/LUT/Divisions/CurrentPlanning/Applications/index.cfm

## **EPA Archived Pages**

EPA online training for watershed management

https://www.epa.gov/watershedacademy/online-training-watershed-management%23introductory

Importance of Streams

https://archive.epa.gov/water/archive/web/html/streams.html

Rivers & Streams

https://archive.epa.gov/water/archive/web/html/index-17.html

#### **Federal**

## U.S. Army Corps of Engineers

US ARMY CORPS OF ENGINEERS

http://www.nwp.usace.army.mil/Missions/Regulatory/

Contacts

http://www.nwp.usace.army.mil/Missions/Regulatory/Contact.aspx

#### **Land Trusts**

**About Land Trusts** 

https://www.opb.org/programs/oregonstory/land\_trusts/about\_trusts/index.html

**About The Wetland Conservancy** 

http://wetlandsconservancy.org/about-us/

**Land Conservation Tools** 

http://wetlandsconservancy.org/conservation/conservation-tools/

**Oregon Land Trust Contacts** 

https://www.opb.org/programs/oregonstory/land\_trusts/resources/page\_2.html

# **Land Use Planning**

**Gaining Ground** 

http://oe.oregonexplorer.info/stories/landuse/landuse.php?p=26

History of Land Use Planning

http://oregonexplorer.info/content/history-land-use-planning?topic=4123&ptopic=62

Land Use and Measure 49

http://oregonexplorer.info/content/land-use-and-measure-49?topic=4123&ptopic=62

Land Use and Planning in Oregon

http://oregonexplorer.info/content/land-use-and-planning-oregon?topic=4123&ptopic=62

Oregon State Water-Related Permits User Guide

http://www.oregon.gov/DSL/WW/Documents/water related permits user guide 2012.pdf



#### Metro

Land Use Library

https://www.oregonmetro.gov/library/land-use-library-shelf

## **Oregon Department of Environmental Quality DEQ**

**DEQ Biofilters** 

http://www.deg.state.or.us/wg/stormwater/docs/nwr/biofilters.pdf

Water Quality Home

http://www.oregon.gov/deq/wq/Pages/default.aspx

Water Quality Permits

http://www.oregon.gov/deq/wq/wqpermits/Pages/default.aspx

## **Oregon Department of Fish and Wildlife**

Conservation Toolbox

http://www.oregonconservationstrategy.org/conservation-toolbox/

Guidelines for Timing of In-Water Work

https://www.dfw.state.or.us/lands/inwater/Oregon Guidelines for Timing of InWater Work2008.pdf

In-water Blasting Permit Application

https://www.dfw.state.or.us/lands/inwater/inwater\_app.pdf

Oregon Conservation Strategy

http://www.oregonconservationstrategy.org/

Oregon's Existing Planning and Regulatory Framework

http://oregonconservationstrategy.org/conservation-toolbox/existing-planning-and-regulatory-framework/

## **Oregon Department of Lands**

Check Application or Delineation process

http://statelandsonline.com/

Contacts by Region

http://www.oregon.gov/dsl/WW/Pages/WWStaff.aspx#map

Contacts by Staff Directory Table

http://www.oregon.gov/dsl/WW/Pages/WWStaff.aspx

Mitigation

http://www.oregon.gov/dsl/WW/Pages/Mitigation.aspx

Mitigation specialists- contacts

http://www.oregon.gov/dsl/WW/Pages/WWStaff.aspx#map

Permits & Authorizations

http://www.oregon.gov/dsl/WW/Pages/Permits.aspx

Waterways & Wetlands

http://www.oregon.gov/dsl/WW/Pages/Permits.aspx

Waterways & Wetlands: Forms

http://www.oregon.gov/dsl/WW/Pages/WWforms.aspx

Waterways & Wetlands: Laws & Rules

http://www.oregon.gov/dsl/WW/Pages/WWLaw.aspx

Waterways & Wetlands: Publications

http://www.oregon.gov/dsl/WW/Pages/WWPubs.aspx

Wetland Planning and Conservation

http://www.oregon.gov/dsl/WW/Pages/WetlandConservation.aspx

**Technical Resources** 

http://www.oregon.gov/dsl/WW/Pages/Resources.aspx



## **Oregon Department of Land Use and Conservation**

Contacts for Information

http://www.oregon.gov/LCD/Pages/goal5explan.aspx#More information

Goal 5

http://www.oregon.gov/LCD/Pages/goal5explan.aspx

Oregon Wetland Planning Guidebook

http://www.oregon.gov/dsl/WW/Documents/wet\_plan\_guide.pdf

## **Oregon Explorer**

Oregon Explorer

http://oregonexplorer.info/topics/watersheds?ptopic=98

Animals and Plants

http://oregonexplorer.info/topics/Animals-and-Plants

Climate, Water, and Air

http://oregonexplorer.info/topics/Climate%2C-Water%2C-and-Air

Coast, Ocean, and Marine

http://oregonexplorer.info/topics/Coast%2C-Ocean%2C-and-Marine

Forestry and Agriculture

http://oregonexplorer.info/topics/Forestry-and-Agriculture

Land Use and Planning

http://oregonexplorer.info/topics/Land-Use-and-Planning

Regulatory Agencies

http://oregonexplorer.info/search/site/Regulatory agencies

**Permits** 

http://oregonexplorer.info/search/site/Permits

Wetland Regulations

http://oregonexplorer.info/content/wetland-regulations?topic=4138&ptopic=98

Landscapes and Ecosystems

http://oregonexplorer.info/topics/Landscapes-and-Ecosystems

Restoration

http://oregonexplorer.info/topics/restoration?ptopic=98

People and Communities

http://oregonexplorer.info/topics/People-and-Communities

## **Oregon Water Resources**

Oregon Water Resources

http://www.oregon.gov/owrd/Pages/pubs/index.aspx

Water-Related Permitting Guide

http://www.oregon.gov/DSL/WW/Documents/water related permits user guide 2012.pdf

## **Oregon Watershed Enhancement Board**

A guide to Oregon Permits

http://www.oregon.gov/OWEB/docs/pubs/permitguide.pdf

Oregon Watershed Enhancement Board

http://www.oregon.gov/OWEB/pages/index.aspx

Regional Program Representatives

http://www.oregon.gov/oweb/Documents/RPR-Contact-Map.pdf

Watershed Council Resources and Links

http://www.oregon.gov/OWEB/Pages/resources.aspx



## Removal-fill permit

http://www.oregon.gov/DSL/WW/Documents/water related permits user guide 2012.pdf

## **Soil and Water Conservation Districts**

#### **Tualatin Soil and Water Conservation District**

About

https://www.swcd.net/about-us/

Stream

https://www.swcd.net/stream/

#### West Multnomah Soil and Water Conservation District

Tips for Streamside Landowners in Multnomah County

https://wmswcd.org/wp-content/uploads/2016/06/Tips-For-Streamside-Landowners-in-Multnomah-County.pdf

#### **Streams**

Environmental Protection Agency's Web Archive: Water: Rivers & Streams

https://archive.epa.gov/water/archive/web/html/streams.html

Owner's Manual Natural Resource Stewardship for Homeowner's Associations

http://www.davey.com/hoa/index.html

USGS: Science in Your Watershed

https://water.usgs.gov/wsc/glossary.html#Stream

## **Tualatin Riverkeepers**

About-Tualatin Riverkeepers

http://tualatinriverkeepers.org/

**Restoration Information** 

http://tualatinriverkeepers.org/restoration/

#### **Tualatin River Watershed Council**

Education

http://trwc.org/category/resource-links/education/

Government and Statewide Agencies

http://trwc.org/category/resource-links/government-and-statewide-agencies/

It is all About the Water

http://trwc.org/wp-content/uploads/2012/11/Janurary-2012-Council-Powerpoint-It-is-all-about-Water1.pdf

Regional Agencies

http://trwc.org/category/resource-links/regional-agencies/

Watershed Organizations

http://trwc.org/category/resource-links/watershed-organizations/

## **Watershed**

Tualatin Soil and Water Conservation District; Know Your Watershed

https://www.swcd.net/education/schools/know-your-watershed/

#### **Wetlands**

Wetland Fact Sheet

http://www.oregon.gov/DSL/WW/Documents/DSL wetlands fact march 2015 web.pdf



## Photo Key- Curious about the photos in this guide?



A sure sign that a North American Beaver is

in a water shed is the telltale chewing pattern at the base of a tree.



Northern Flickers (Colaptes auratus)



North American Beaver-Oregon's State mammal. Beavers are native to Oregon... not to be confused with Nutria, an introduced, invasive!



Tualatin River Water Trail
Farmington Paddle
Launch



Northern Shoveler (Spatula clypeata)



Common Yellow-throat (Geothlypis trichas)



Mallard pair (Anas platyrhynchos)



Belted Kingfisher (Megaceryle alcyon)



Female:
Gadwall (Anas Strepera)
Female:
Hooded Merganser

(Lophodytes cucullatus)



Great Egret (Ardea alba)



Barred Owl (Strix varia)



Painted Turtle (Chrysemys picta)
Native turtle. Oregon Conservation Strategy Species

Western



Just Another Nature Enthusiast- Photography by Jane Wilson is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License © Jane Wilson and Just Another Nature Enthusiast, 2018.

## Then and Now

Understanding the need for citizen awareness and involvement in land use planning that affects the Tualatin River Watershed is a long-time tradition with the Tualatin Riverkeepers. In 2002, they authored, "How to Protect Wetland and Streams in the Tualatin Watershed: A Guide for Community Involvement." That document connected the public with tools needed to have a voice in the regulatory processes associated with wetland and stream land use development before online tools were easily accessed.

This update was created with that tradition in mind. It is a resource to put the rich collection of informative, interactive, and current online tools and websites developed by government, non-profit, and education agencies and organizations in the hands of people who want to participate in protecting Tualatin River watershed resources... their neighborhood source for clean water.

#### Thank you:

Ruby Buchholtz, Tualatin Riverkeeper; Steve Engel, Jackson Bottom Nature Program Supervisor; Jane Wilson, Oregon Master Naturalist for providing the enthusiasm, interest, and collaboration to make this project possible.

