

# Ditch and Tidegate Management

## *Fact Sheet*



A sizeable portion of the agricultural ground in Coos County is **farmed wetland** or was **formerly estuarine marsh**.

Ranchers and farmers must maintain a system of dikes, tidegates, and ditches in order for these lands to remain in agricultural production.



*This brochure was produced by the Coos Soil & Water Conservation District in conjunction with the Coos & Coquille Agricultural Water Quality Management Area Plan and in partnership with the Oregon Department of Agriculture and the Natural Resources Conservation Service.*

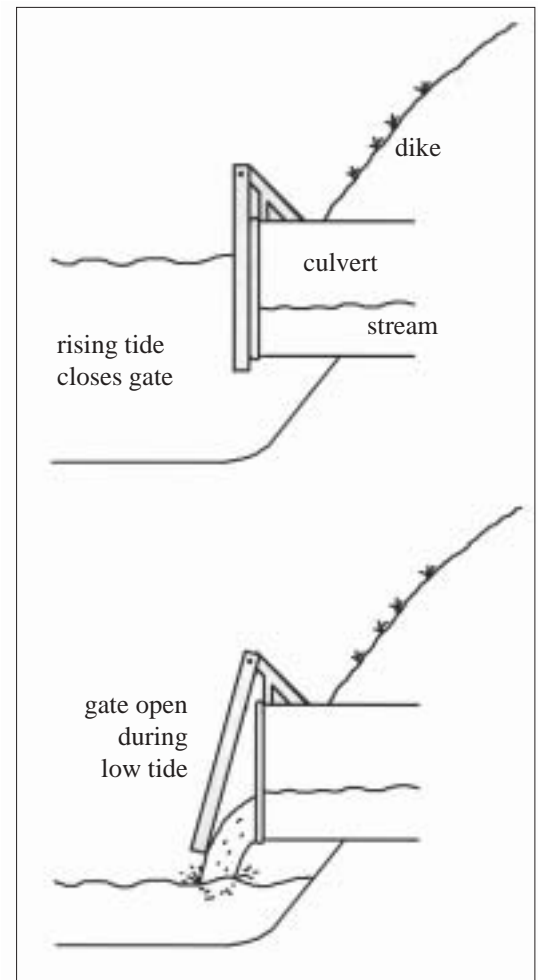
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## *Good management of ditches and tidegates benefits all.*

A **tidegate** is a mechanical device placed in a dike or natural riverbank to control tidal fluctuations. This device may consist of a wooden or metal flap hinged on the top of a downstream end of a culvert. The tidegate is positioned so that a rising tide forces the gate against the culvert, preventing flooding inside the dike. Freshwater then backs up behind the gate. On the ebb tide, the gate opens when the downstream level is lower than the freshwater level, allowing drainage of the pasture land.

### **A well-maintained system of dikes, tidegates, and ditches will attain two goals:**

- (1) water will drain off the land in a timely fashion, and
- (2) tidewaters, which are saline, are kept from flooding surrounding pasture lands.



**Positive Management Practices** for tidegates and associated structures should have the following general objectives:

- ◆ Recognize the landowners goals;
- ◆ Maintain different species habitat characteristics;
- ◆ Avoid wetland conversion if not desired by the land owner;
- ◆ Maintain or improve bank stability.



Fish-friendly tidegate with float

*If these drainage systems are properly maintained, riparian and aquatic habitat can be provided and often enhanced for a broad range of species.*

The following management practices have been recommended by the Coos and Coquille Local Advisory Committee and the Oregon Department of Agriculture as a means to avoid water quality problems.

## **Positive Management Practices**

- Obtain necessary permits from appropriate agencies.
- Maintain systems in good operating condition.
- Consider leaving vegetation on one side of the ditch, preferably the south side, and leaving the opposite side open for maintenance.
- Consider adaptive management options, such as leaving the tidegate open during high winter flow outside of grazing season.

## **Conditions That May Lead To A Water Quality Problem**

- Improperly functioning tidegates and culverts.
- Construction and maintenance of surface drainage ditches that causes excessive placement of soil, delivery of sediment, or sloughing of soil into waterways.

## **Unacceptable Condition**

- Excessive sediment loss into waterways from improper ditching and/or maintenance of ditches.

There is no Oregon Administrative Rule corresponding to the Coos and Coquille AgWQM Plan for Ditch and Tidegate Management.



*Conservation practices addressed here, such as the Positive Management Practices, may be eligible for USDA's Natural Resources Programs, such as the Environmental Quality Incentives Program (EQIP) and the Conservation Reserve Enhancement Program (CREP). These programs provide producers with financial, technical, and educational assistance for implementing conservation practices. Contact NRCS or FSA (below) for more information.*

*Development of an individual conservation plan for your operation may help you comply with the SB 1010 Coos & Coquille Agricultural Water Quality Management Area Plan. Contact the Coos SWCD Watershed Technical Specialist for assistance.*

### **For More Help Contact...**

Coos Soil and Water  
Conservation District (SWCD)  
382 N. Central Blvd.  
Coquille, OR 97423  
(541) 396-6879  
www: <http://or.nacdnet.org/coosswcd/>

Oregon Dept. of Agriculture  
Natural Resources Division  
635 Capitol Street NE  
Salem, OR 97301  
(503) 986-4700

Natural Resources Conservation  
Service (NRCS)  
382 N Central Blvd  
Coquille, OR 97423  
(541) 396-2841

Farm Services Agency (FSA)  
380 N Central Blvd  
Coquille OR 97423  
(541) 396-4323

Oregon Dept. of Environmental Quality  
340 N Front Street  
Coos Bay OR 97420  
(541) 269-2721 ext 27

OSU Extension Service  
Coos County Office  
290 N Central Blvd  
Coquille OR 97423  
(541) 396-3121 ext 240

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Information in this fact sheet was gathered from the Coos and Coquille Agricultural Water Quality Management Plan, the Natural Resources Conservation Service, and the Washington County Soil and Water Conservation District.

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Tidegate illustration by Matt Drechsel. Ditch maintenance illustration by Sandra Noel, Adopting A Stream A Northwest Handbook, Adopt-A-Stream Foundation, 1988.

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Produced by Bessie Joyce, 2002.

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