



Tuesday, September 28, 2010

Tidegate keeps options open

Gate at Warren Slough seeks to cut down water flow, open railroad

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The Daily Astorian

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ALEX PAJUNAS — The Daily Astorian
The newly installed tidegate at Warren Slough regulates water flow into Gary Ziak's field in Knappa Monday.

KNAPPA - The sun was shining and water was whirring through the newly-installed tidegate at Warren Slough, near Knappa, Monday.

It looked like someone had come through with a broom: the water swept into respectable pools between low and high tide and the different metal and wood pieces of the washed-out rail line in neat piles.

The tidegate and an accompanying culvert represent a point of balance for the multiple agencies involved in Warren Slough.

A series of breaches and washouts at the slough's railroad dike roughly five years ago did several things:

- allowed a lot more water to flow through the area, creating what some saw as ideal habitat for juvenile salmon. Local conservationists and the National Oceanic Atmospheric Administration wanted to preserve the naturally restored wetlands;
- damaged nearby land-owners' property and threatened the county-owned bridge on Ziak-Gnat Creek Road;
- turned into a tangle of agencies and interests.

But despite everything - all the meetings, setbacks, interests and arguments - a tidegate was installed at the end of August and appears to be working.

"I think everyone should be happy with the results," said landowner Gary Ziak.



ALEX PAJUNAS — The Daily Astorian
The construction of the Warren Slough tidegate reopens the door for a railroad connection between North Tongue Point and Portland.

Before: The water washed in with high tides and heavy rains, covering the surrounding fields and sending water rushing beneath the county bridge. The fast and forceful flow of water ate away at the bridge and often flooded the road in the winter.

After: Now the muted tidal regulator gate is in place, a "top of the hierarchy" tidegate as far as fish passage in Oregon goes, said County Engineer Ron Ash. Water is allowed in and out - hopefully not too much, and hopefully not too little.

Already, Ziak said he sees a positive difference.

The Oregon Department of Transportation will be monitoring the tidegate for one year, making sure inundation levels stay in a good spot.

The Oregon Department of Fish and Wildlife, ODOT, NOAA Fisheries, Clatsop County, the U.S. Army Corps of Engineers, and the Portland & Western Railroad all had a hand in the process and all had to sign off on the project at some point.

There are still a few more meetings left to figure out what happens next, said Chuck Gilbert, a rail crossing compliance specialist with ODOT.

County planners and engineers remain involved because of the Ziak-Gnat Creek Road bridge, which will need to be repaired, said Ed Wegner, transportation and development services director with Clatsop County. When the slough was flooded, it squeezed a lot of water at a high velocity under the bridge, cutting away at the structure.

For the county and the bridge, winter will be the real test, Wegner said.

Agencies also have to wait and see if the tidegate will, by slowing the water flowing in and out, encourage salmon populations. Another question is: What's going to happen to the rail line now?

"We're in a waiting game," said Jack Crider, executive director of the Port of Astoria. The port hopes to get rail service out to its industrial facilities at Tongue Point, but other things need to fall in place first, Crider said.

Things like someone interested in moving materials or products down the lines.

"Why should (P&W) invest any money unless there's a someone on the other side? That makes sense to me," Crider said.

"We at least need to clear and prepare the track at our end," he added. The track near Tongue Point is overgrown in spots with brush and grasses.

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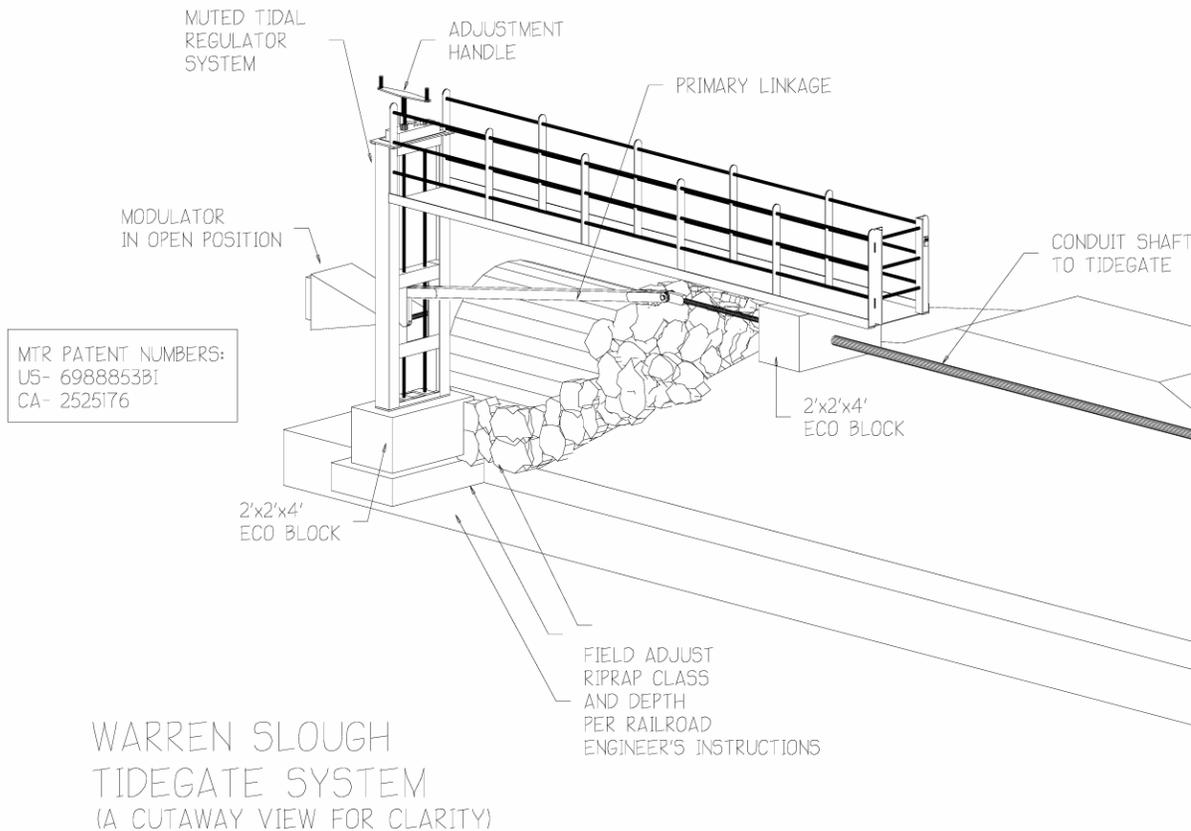
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Warren Slough Restoration

In the Warren Slough restoration project Nehalem Marine Manufacturing installed their revolutionary Muted Tidal Regulator system (MTR). This system is revolutionary because the gates remain fully opened until the interior level of water dictates a closing. This is the opposite of old tidegate systems in which the gates opened and closed with the exterior level of water, which meant the gates could be closed for ten to twelve hours at a time thus restricting fish passage and creating stagnant water behind the gates.

With this system the gates are default open which greatly extends the time fish passage is available. Creating a muted or small interior tide solves the problem of stagnant pools behind the gates allowing the habitat to return to a productive state that was eliminated when the area was levied off. (sometimes a century or more)

We like to think of this as compatible restoration. A process in which the highest level of wetland restoration is achieved while still recognizing the present land use.



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