

Top Hinge Tidegates

All of our tidegates and tidegate accessories are made of marine grade aluminum.

NTG round top hinge tidegates are available to fit most popular culvert sizes with coupling sleeves and headwall assembly or to be mounted to concrete headwalls. Normal sizes range from 1' to 10' diameter or any custom diameter. NTRG rectangular top hinge tidegates are available in any dimension.

Top hinge Tidegates are a simpler design than the side hinge tidegates. They can be fitted with mitigators to allow them to have better fish passage. They typically require more velocity to open, and stay open a shorter period than the side hinge tidegates.



NTG2oa & NTG3oa Tidegates

These tidegates have coupling sleeves and an aluminum headwall assembly.



This NTRG 6x8 gate is fitted with a manual/curtain door adjustment system. →



This is an NTG4oa tidegate before and after installation.



This NTRG 6x8 rc tidegate is fitted with a manual/curtain adjustment system to allow fish passage. Also shown are two NSRG 6x8 oc

Key:

NTG = Nehalem top hinge gate (round)

NSG = Nehalem side hinge gate (round)

NSRG = Nehalem side hinge rectangular gate

NTRG = Nehalem top hinge rectangular gate

= size

o = no accessory

r = regulated

a = aluminum headwall

c = concrete headwall

Nehalem Marine Manufacturing



Side Hinge Tidegates

All of our tidegates and tidegate accessories are made of marine grade aluminum.

NSG round Side hinge tidegates are available to fit most popular culvert sizes with coupling sleeves and headwall assembly or to be mounted to concrete headwalls. Normal sizes range from 1' to 10' diameter or any custom diameter. NSRG rectangular Side hinge tidegates are available in any dimension.

Side hinge tidegates are preferred for fish passage because they offer a much easier opening for fish to navigate, increased volume of passage and require far less velocity to achieve opening. When fish passage is an issue normally side hinge tidegates are preferred and sometimes required. Side hinge tidegates also out perform top hinge tidegates 30-40% in conveyance during high flow (flood) conditions. Side hinge tidegates are also more easily regulated by the MTR systems. This is because the MTR Systems do not have to overcome the weight of the door to achieve opening. Side hinge tidegates can also be fitted with mitigator to facilitate fish passage.



This NSG6ra tidegate is equipped with a coupling sleeve, an aluminum headwall assembly, an anti hammer device and a MTR unit.



This is an NSG6ra tidegate before and after installation.



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Side Hinge Tidegates

All of our tidegates and tidegate accessories are made of marine grade aluminum.



This NSG6ma tidegate is fitted with a mitigator to facilitate fish passage. ←



This NSG6ra tidegate is fitted with a linkage to hook to a MTR system. →



This NSG9ma tidegate is equipped with a mitigator type linkage, which opens and closes a small auxiliary door in the main tidegate. It is also fitted with an metal headwall assembly.



NSG6ra tidegate assembly ready for install ←

NSG5ra specially modified with a guillotine control assembly to allow the gate assembly to be manually raised and lowered. →



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Side Hinge Tidegates

All of our tidegates and tidegate accessories are made of marine grade aluminum.



This is a NSRG 8x10 tidegate



This is a NSRG 5x12 floodgate on a flood control structure.



This is an NSRG 5x6 tidegate installed in Arcata, CA. The NSRG 5x6 is mounted to the concrete.



These massive NSRG 9 x 11 tidegates are mounted to aluminum frames which are anchored to the concrete wall. All three gates are operated by a single MTR system.

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Tidegate Accessories

All of our tidegates and tidegate accessories are made of marine grade aluminum.

Muted Tidal Regulators (MTR's)

MTR's function is to open and close the tidegates at set interior water levels. This control over when the tidegates open and close allows them to be open longer periods of time which is good for fish passage, as well as keeping the water behind the gates from becoming stagnant.

A float tank is set at the desired level and as the water moves up and down it follows, thereby moving levers and control rods which open and close the doors.



This is a small interior-MTR which runs an auxiliary door on a NSRG 5x6' tidegate.

MTR



MTR Controlled
Auxiliary Door



This is an MTR unit controlling a single NSG6ra tidegate.



This MTR Unit controls one tidegate and one is conventional.

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This MTR System controls one tidegate.



Walkway to MTR unit so that the adjustment handle can be reached to set MTR to the interior water level that the tidegate will close at.



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Mitigators

Mitigators are devices which allow a very controlled backflush or muted tide to enhance and improve the interior water quality and extend fish passage. It does this by allowing the gate to remain slightly open to allow a larger window of fish passage when the gate would normally be fully shut. When the tide begins to rise and float the floats then the shaft rotates and allows the door to close before interior levels become too high.

Mitigators can be used on tidegates or auxiliary doors in tidegates.



These NSG6ra tidegates are equipped with coupling sleeves, aluminum headwall assemblies and mitigators.



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Auxiliary Doors

Auxiliary Doors are small doors in the face of the tidegate. Their function is to allow a small flow of water when the gate is in the closed position, this allows additional fish passage, controlled backflow and a muted tide.

There are three different types of auxiliary doors; fixed aperture, adjustable aperture and controlled aperture.



This NSRG5x6 tidegate is equipped with a auxiliary door which is controlled by an small MTR system.



This is an NSG9ra tidegate before and after installation. Its auxiliary door is a mitigator type controlled aperture.



Tidegate Accessories

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Anti Hammer Devices

These are devices to reduce the risk of the very damaging phenomena of “water hammer” and are recommended with any MTR installation.



This NSG6ra tidegate is equipped with a coupling sleeve, an aluminum headwall assembly, anti hammer device and a MTR unit. (Headwalls & coupling sleeves are part of a “tidegate assembly”.)



Other Accessories & Features



This is an NSG5ra tidegate is fitted with a guillotine adjustment system.



Structures

Nehalem Marine Manufacturing is more than tidegate production, we also do quality site work.



The E-Bridge is one of our latest developments. It is an environmentally and economically sound design. It not only preserves the natural stream bank but cost much less than typical bridge construction. Also, there is virtually no waste at the end of the job as the forms used to build the bridge are simply washed and packed up for the next job.



Salmon Creek Tidegates



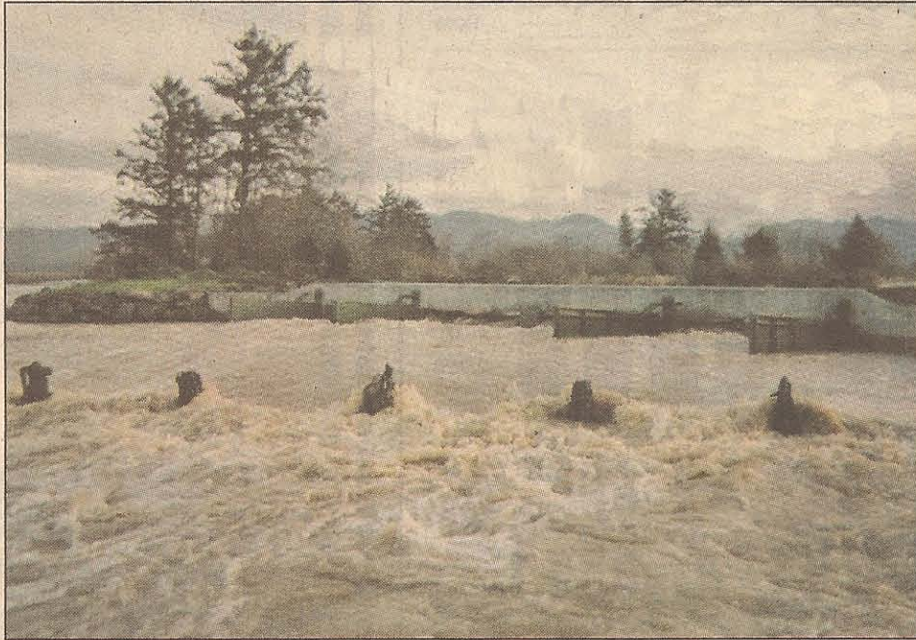
Flood spillway passes test

By AMBER NOBE
Headlight-Herald Staff

TILLAMOOK — Seven weeks after two busloads of people gathered to dedicate the Wilson River spillway, a lone boat motored out to the flooded site. The roar of water gushing through the open flood gates could be heard from the Cape Meares Highway in the early morning, and Leo Kuntz of Nehalem Marine knew the spillway was working.

Paul Levesque, with the county, and Doug Rosenberg, president of the Tillamook Bay Habitat and Estuary Improvement District, had nothing but praise for the spillway after the

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Water from the Wilson River rushed through the green spillway gates toward the bay last week. In the foreground, the tips of old pilings can be seen.

COURTESY PHOTO



This project was for Oregon Solutions. Completed September of 2008

