

## HIGH PRIORITY AREA

# Quilceda Estuary



The **Quilceda Estuary** is one of five priority areas in the Snohomish River estuary where the Snohomish County Marine Resources Committee (Snohomish MRC) is looking for willing landowners interested in removing pilings on their property. Please see priority map on next page.

The project aims to improve habitat conditions in the estuary by informing landowners of the ecological benefits of removing toxics associated with the creosote-treatment of many of the pilings, as well as in-water impacts of the piling being in place. The project is to inform landowners and encourage piling removal where feasible.

## Project Background

The Snohomish MRC inventoried pilings in the estuary and conducted a prioritization to identify which pilings would provide the greatest ecological benefits if removed. The prioritization also includes consideration of the apparent feasibility of removal. The effort only focuses on those pilings that do not have an apparent structural purpose, such as part of a bulkhead or a marina. The Snohomish River estuary downstream of Highway 2 has 15,564 non-structural pilings (see page 2 inset map of locations) of which 2,456 are treated with creosote. Prioritization report available at: <https://www.snocomrc.org/projects/creosote-pilings/>

## Creosote Piling Effects

Creosote is a coal-tar sourced preservative that was historically used to treat wood pilings. In the aquatic environment, creosote leaches from the pilings over time and concentrates in the surrounding water and sediments with damaging ecological effects. Research has shown that creosote and its associated toxins have negative health effects on humans—including being a probable carcinogen—and animals including fish eggs and the small invertebrates that juvenile salmon feed on.

## Additional Piling Effects

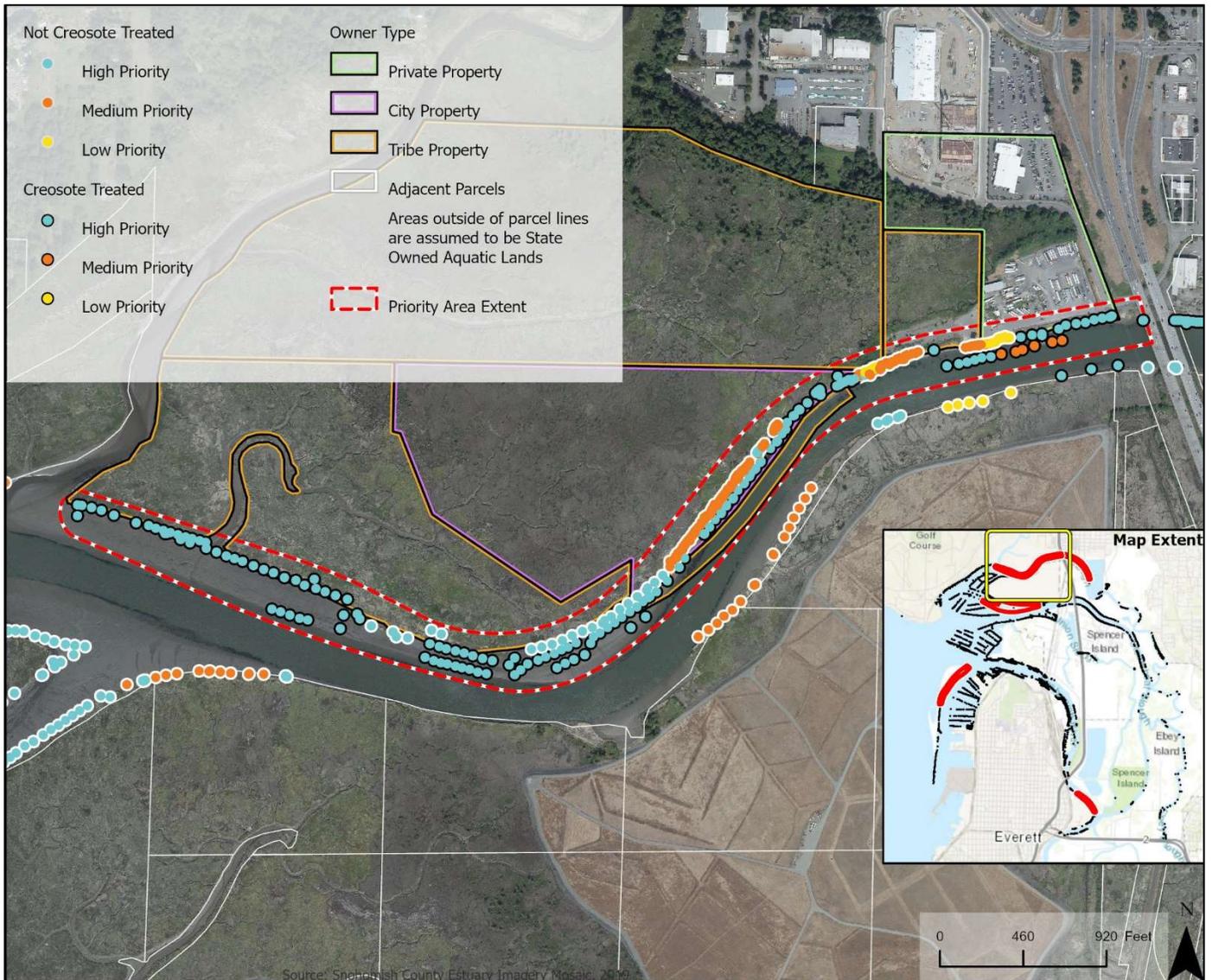
Pilings, whether creosote-treated or not, can affect estuary habitats. Just by occupying space, pilings reduce the availability of natural sandy habitats. Each individual piling can also affect a larger surrounding area through the scour effects of tidal water moving past the structure. When a piling is in salt marsh or other aquatic vegetation, this “halo effect” around the piling can result in decreased vegetation cover. Despite these negative impacts, pilings can provide habitat for birds and other aquatic invertebrate species, such as barnacles, which require hard substrate to grow on.

## Voluntary Project

This is a voluntary effort seeking willing landowners. If you would like to learn more about the project, please visit [www.snocomrc.org/projects/creosote-pilings](http://www.snocomrc.org/projects/creosote-pilings) or call Elisa Dawson, Snohomish MRC Staff at (425) 388-6466.



# Quilceda Estuary



Statistics Summary		
491	179	312
Number of Pilings	Creosote Treated	Not Creosote Treated

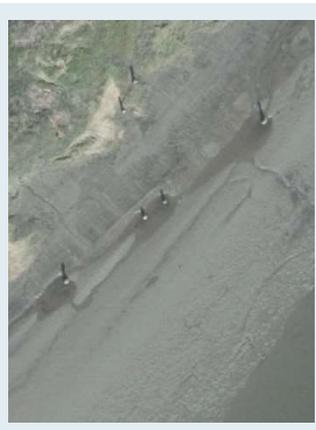
Property Ownership		
Tulip Tribes: 125	City of Marysville: 218	State Owned: 148
This High Priority Area is located in the Tulip Reservation and is under the Tulip Tribes' regulatory authority regardless of parcel ownership.		

High Priority	Medium Priority	Low Priority
213	236	42



Pilings in and near salt marsh vegetation



Scour hole depressions visible around pilings

This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401]. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

## HIGH PRIORITY AREA

# Marysville Waterfront



The **Marysville Waterfront** is one of five priority areas in the Snohomish River estuary where the Snohomish County Marine Resources Committee (Snohomish MRC) is looking for willing landowners interested in removing pilings on their property. Please see priority map on next page.

The project aims to improve habitat conditions in the estuary by informing landowners of the ecological benefits of removing toxics associated with the creosote-treatment of many of the pilings, as well as in-water impacts of the piling being in place. The project is to inform landowners and encourage piling removal where feasible.

## Project Background

The Snohomish MRC inventoried pilings in the estuary and conducted a prioritization to identify which pilings would provide the greatest ecological benefits if removed. The prioritization also includes consideration of the apparent feasibility of removal. The effort only focuses on those pilings that do not have an apparent structural purpose, such as part of a bulkhead or a marina. The Snohomish River estuary downstream of Highway 2 has 15,564 non-structural pilings (see page 2 inset map of locations) of which 2,456 are treated with creosote. Prioritization report available at: <https://www.snocomrc.org/projects/creosote-pilings/>

## Creosote Piling Effects

Creosote is a coal-tar sourced preservative that was historically used to treat wood pilings. In the aquatic environment, creosote leaches from the pilings over time and concentrates in the surrounding water and sediments with damaging ecological effects. Research has shown that creosote and its associated toxins have negative health effects on humans—including being a probable carcinogen—and animals including fish eggs and the small invertebrates that juvenile salmon feed on.

## Additional Piling Effects

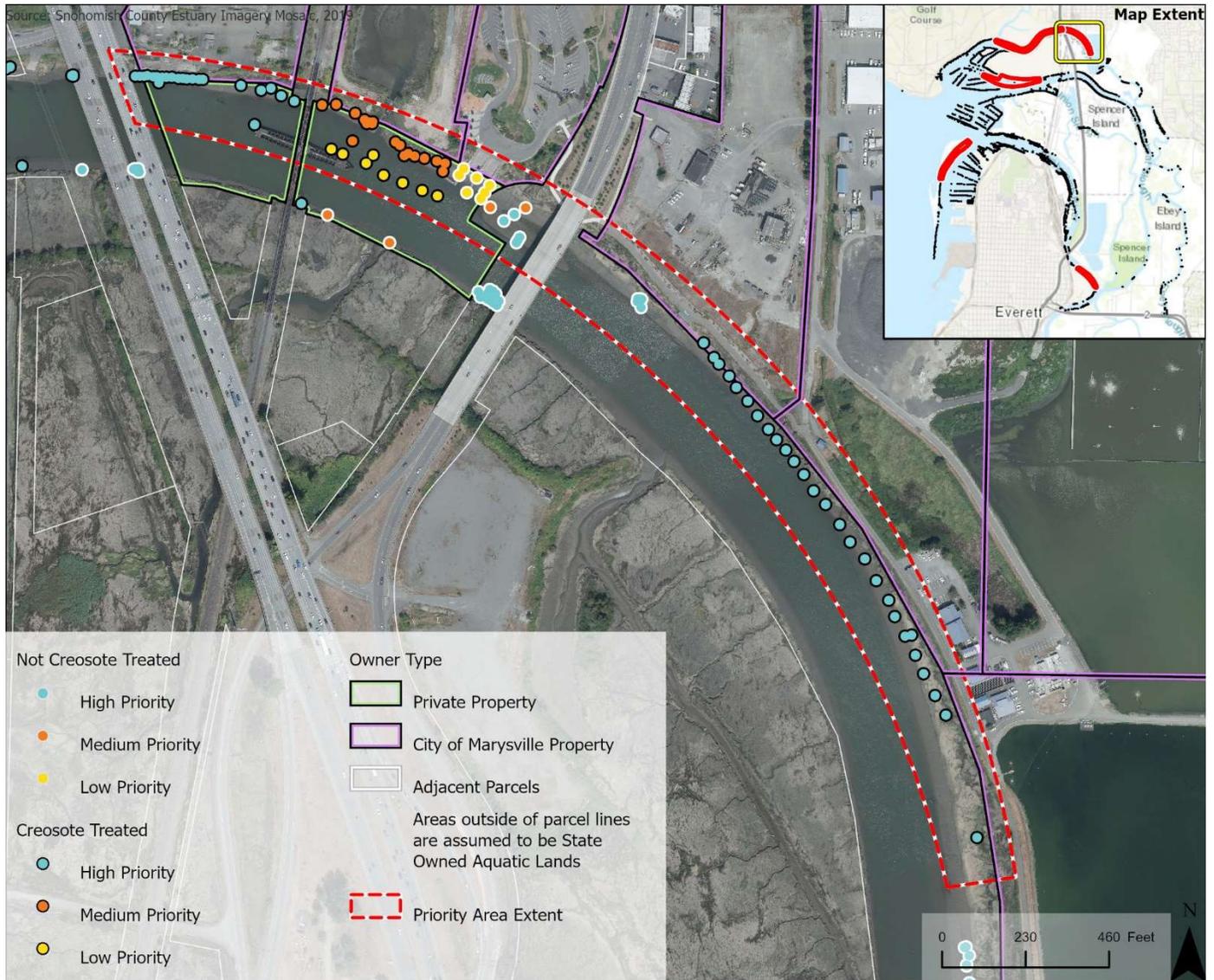
Pilings, whether creosote-treated or not, can affect estuary habitats. Just by occupying space, pilings reduce the availability of natural sandy habitats. Each individual piling can also affect a larger surrounding area through the scour effects of tidal water moving past the structure. When a piling is in salt marsh or other aquatic vegetation, this “halo effect” around the piling can result in decreased vegetation cover. Despite these negative impacts, pilings can provide habitat for birds and other aquatic invertebrate species, such as barnacles, which require hard substrate to grow on.

## Voluntary Project

This is a voluntary effort seeking willing landowners. If you would like to learn more about the project, please visit [www.snocomrc.org/projects/creosote-pilings](http://www.snocomrc.org/projects/creosote-pilings) or call Elisa Dawson, Snohomish MRC Staff at (425) 388-6466.



# Marysville Waterfront



Statistics Summary		
95	81	14
Number of Pilings	Creosote Treated	Not Creosote Treated
Property Ownership		
State Owned: 40	City of Marysville: 17	Private: 38
High Priority	Medium Priority	Low Priority
60	20	15



This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401]. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

**HIGH PRIORITY AREA**

# Mouth of Steamboat Slough



The **Mouth of Steamboat Slough** is one of five priority areas in the Snohomish River estuary where the Snohomish County Marine Resources Committee (Snohomish MRC) is looking for willing landowners interested in removing pilings on their property. Please see priority map on next page.

The project aims to improve habitat conditions in the estuary by informing landowners of the ecological benefits of removing toxics associated with the creosote-treatment of many of the pilings, as well as in-water impacts of the piling being in place. The project is to inform landowners and encourage piling removal where feasible.

## Project Background

The Snohomish MRC inventoried pilings in the estuary and conducted a prioritization to identify which pilings would provide the greatest ecological benefits if removed. The prioritization also includes consideration of the apparent feasibility of removal. The effort only focuses on those pilings that do not have an apparent structural purpose, such as part of a bulkhead or a marina. The Snohomish River estuary downstream of Highway 2 has 15,564 non-structural pilings (see page 2 inset map of locations) of which 2,456 are treated with creosote. Prioritization report available at: <https://www.snocomrc.org/projects/creosote-pilings/>

## Creosote Piling Effects

Creosote is a coal-tar sourced preservative that was historically used to treat wood pilings. In the aquatic environment, creosote leaches from the pilings over time and concentrates in the surrounding water and sediments with damaging ecological effects. Research has shown that creosote and its associated toxins have negative health effects on humans—including being a probable carcinogen—and animals including fish eggs and the small invertebrates that juvenile salmon feed on.

## Additional Piling Effects

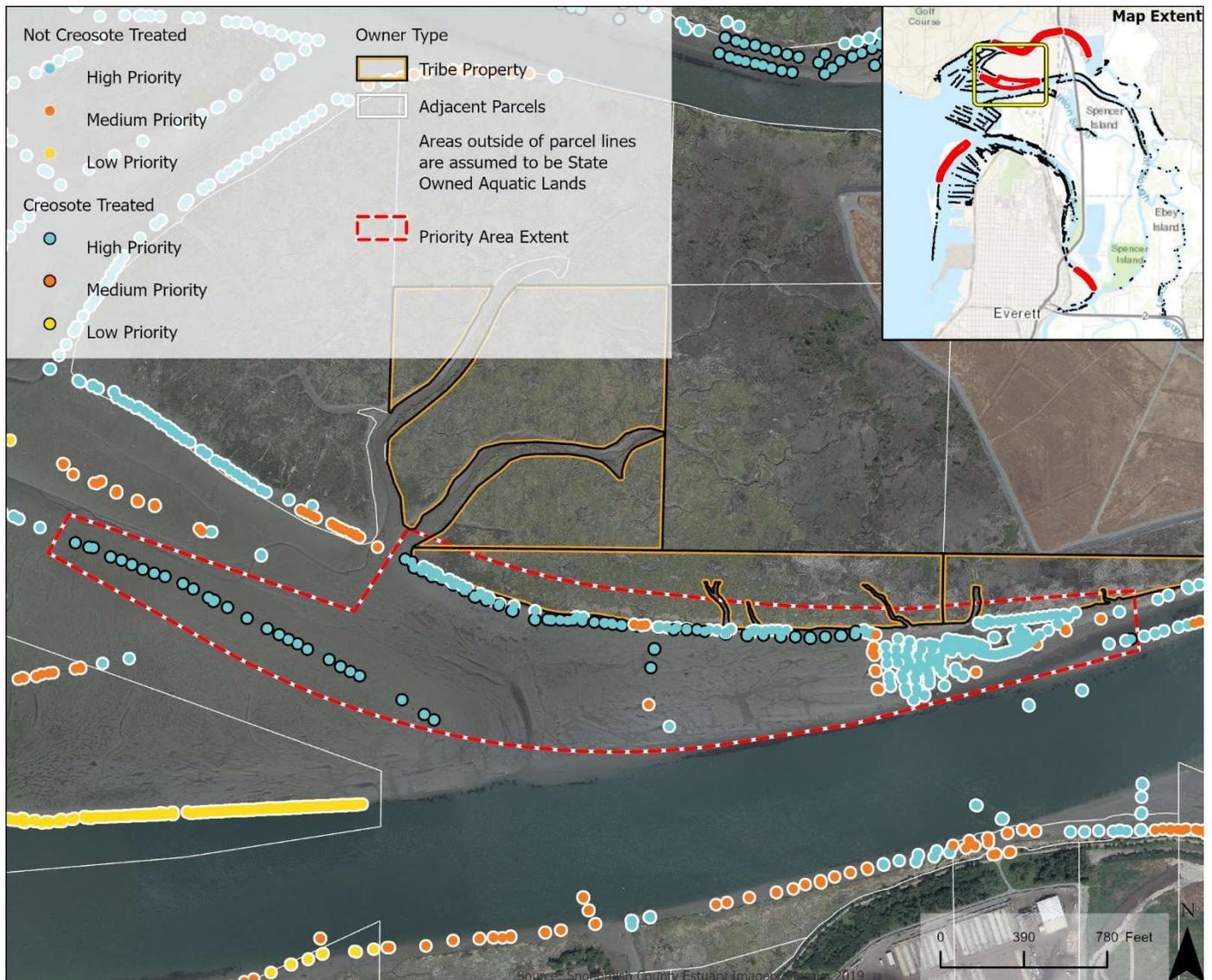
Pilings, whether creosote-treated or not, can affect estuary habitats. Just by occupying space, pilings reduce the availability of natural sandy habitats. Each individual piling can also affect a larger surrounding area through the scour effects of tidal water moving past the structure. When a piling is in salt marsh or other aquatic vegetation, this “halo effect” around the piling can result in decreased vegetation cover. Despite these negative impacts, pilings can provide habitat for birds and other aquatic invertebrate species, such as barnacles, which require hard substrate to grow on.

## Voluntary Project

This is a voluntary effort seeking willing landowners. If you would like to learn more about the project, please visit [www.snocomrc.org/projects/creosote-pilings](http://www.snocomrc.org/projects/creosote-pilings) or call Elisa Dawson, Snohomish MRC Staff at (425) 388-6466.



# Mouth of Steamboat Slough



Statistics Summary		
671	103	568
Number of Pilings	Creosote Treated	Not Creosote Treated
Property Ownership		
State Owned: 664		Tulip Tribes: 7
This High Priority Area is located in the Tulip Reservation and is under the Tulip Tribes' regulatory authority regardless of parcel ownership.		
High Priority	Medium Priority	Low Priority
647	24	0



Pilings in and near salt marsh vegetation

Scour hole depressions visible around pilings

HIGH PRIORITY AREA

# Jetty Island North



The **Jetty Island North** is one of five priority areas in the Snohomish River estuary where the Snohomish County Marine Resources Committee (Snohomish MRC) is looking for willing landowners interested in removing pilings on their property. Please see priority map on next page.

The project aims to improve habitat conditions in the estuary by informing landowners of the ecological benefits of removing toxics associated with the creosote-treatment of many of the pilings, as well as in-water impacts of the piling being in place. The project is to inform landowners and encourage piling removal where feasible.

## Project Background

The Snohomish MRC inventoried pilings in the estuary and conducted a prioritization to identify which pilings would provide the greatest ecological benefits if removed. The prioritization also includes consideration of the apparent feasibility of removal. The effort only focuses on those pilings that do not have an apparent structural purpose, such as part of a bulkhead or a marina. The Snohomish River estuary downstream of Highway 2 has 15,564 non-structural pilings (see page 2 inset map of locations) of which 2,456 are treated with creosote. Prioritization report available at: <https://www.snocomrc.org/projects/creosote-pilings/>

## Creosote Piling Effects

Creosote is a coal-tar sourced preservative that was historically used to treat wood pilings. In the aquatic environment, creosote leaches from the pilings over time and concentrates in the surrounding water and sediments with damaging ecological effects. Research has shown that creosote and its associated toxins have negative health effects on humans—including being a probable carcinogen—and animals including fish eggs and the small invertebrates that juvenile salmon feed on.

## Additional Piling Effects

Pilings, whether creosote-treated or not, can affect estuary habitats. Just by occupying space, pilings reduce the availability of natural sandy habitats. Each individual piling can also affect a larger surrounding area through the scour effects of tidal water moving past the structure. When a piling is in salt marsh or other aquatic vegetation, this “halo effect” around the piling can result in decreased vegetation cover. Despite these negative impacts, pilings can provide habitat for birds and other aquatic invertebrate species, such as barnacles, which require hard substrate to grow on.

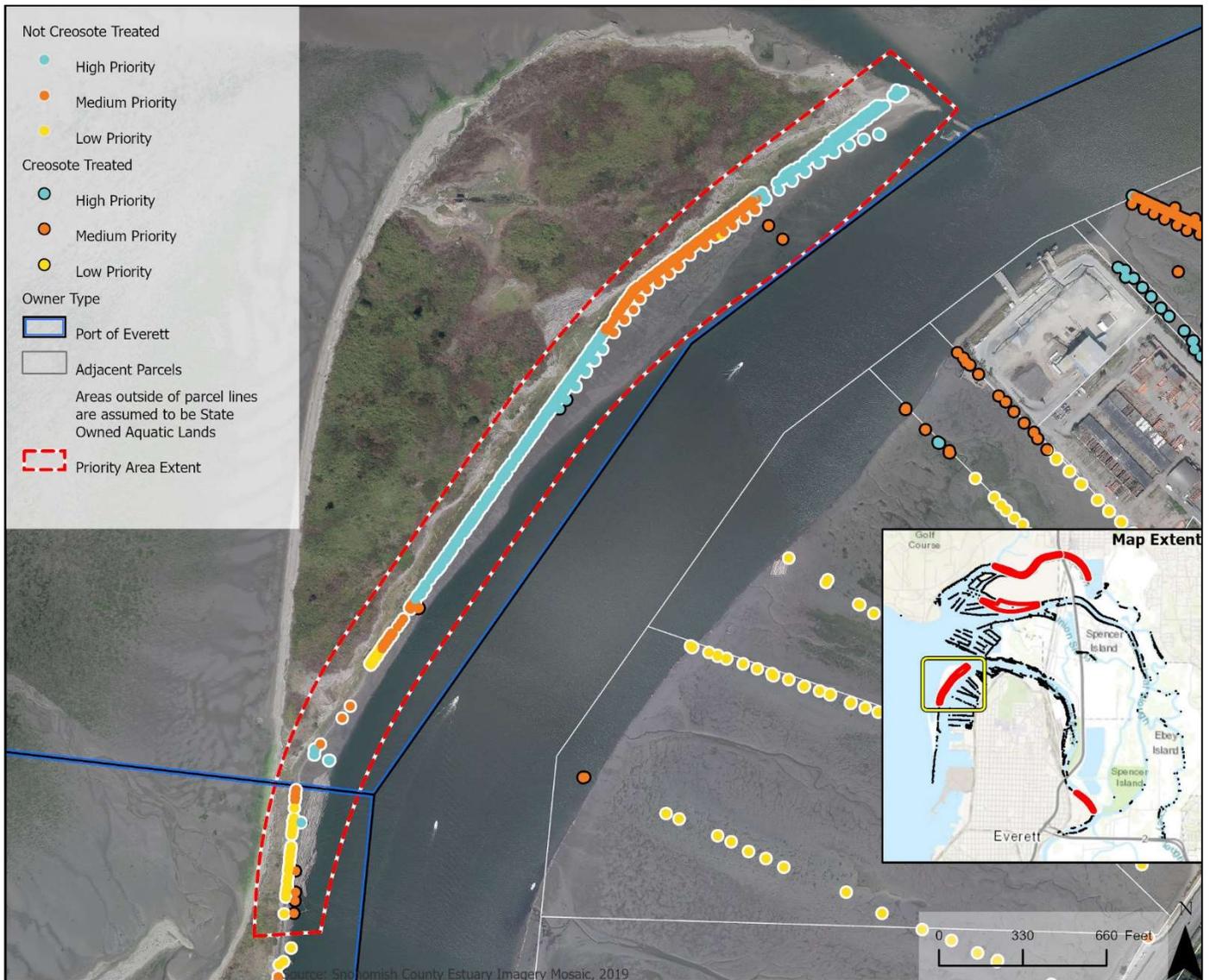
## Voluntary Project

This is a voluntary effort seeking willing landowners. If you would like to learn more about the project, please visit [www.snocomrc.org/projects/creosote-pilings](http://www.snocomrc.org/projects/creosote-pilings) or call Elisa Dawson, Snohomish MRC Staff at (425) 388-6466.





# Jetty Island North



Statistics Summary		
710	22	688
Number of Pilings	Creosote Treated	Not Creosote Treated
Property Ownership		
Port of Everett: 710		
High Priority	Medium Priority	Low Priority
420	241	49



Pilings in and near salt marsh vegetation

Scour hole depressions visible around pilings

This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401]. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

## HIGH PRIORITY AREA

# Everett Public Works Yard



The **Everett Public Works Yard** is one of five priority areas in the Snohomish River estuary where the Snohomish County Marine Resources Committee (Snohomish MRC) is looking for willing landowners interested in removing pilings on their property. Please see priority map on next page.

The project aims to improve habitat conditions in the estuary by informing landowners of the ecological benefits of removing toxics associated with the creosote-treatment of many of the pilings, as well as in-water impacts of the piling being in place. The project is to inform landowners and encourage piling removal where feasible.

## Project Background

The Snohomish MRC inventoried pilings in the estuary and conducted a prioritization to identify which pilings would provide the greatest ecological benefits if removed. The prioritization also includes consideration of the apparent feasibility of removal. The effort only focuses on those pilings that do not have an apparent structural purpose, such as part of a bulkhead or a marina. The Snohomish River estuary downstream of Highway 2 has 15,564 non-structural pilings (see page 2 inset map of locations) of which 2,456 are treated with creosote. Prioritization report available at: <https://www.snocomrc.org/projects/creosote-pilings/>

## Creosote Piling Effects

Creosote is a coal-tar sourced preservative that was historically used to treat wood pilings. In the aquatic environment, creosote leaches from the pilings over time and concentrates in the surrounding water and sediments with damaging ecological effects. Research has shown that creosote and its associated toxins have negative health effects on humans—including being a probable carcinogen—and animals including fish eggs and the small invertebrates that juvenile salmon feed on.

## Additional Piling Effects

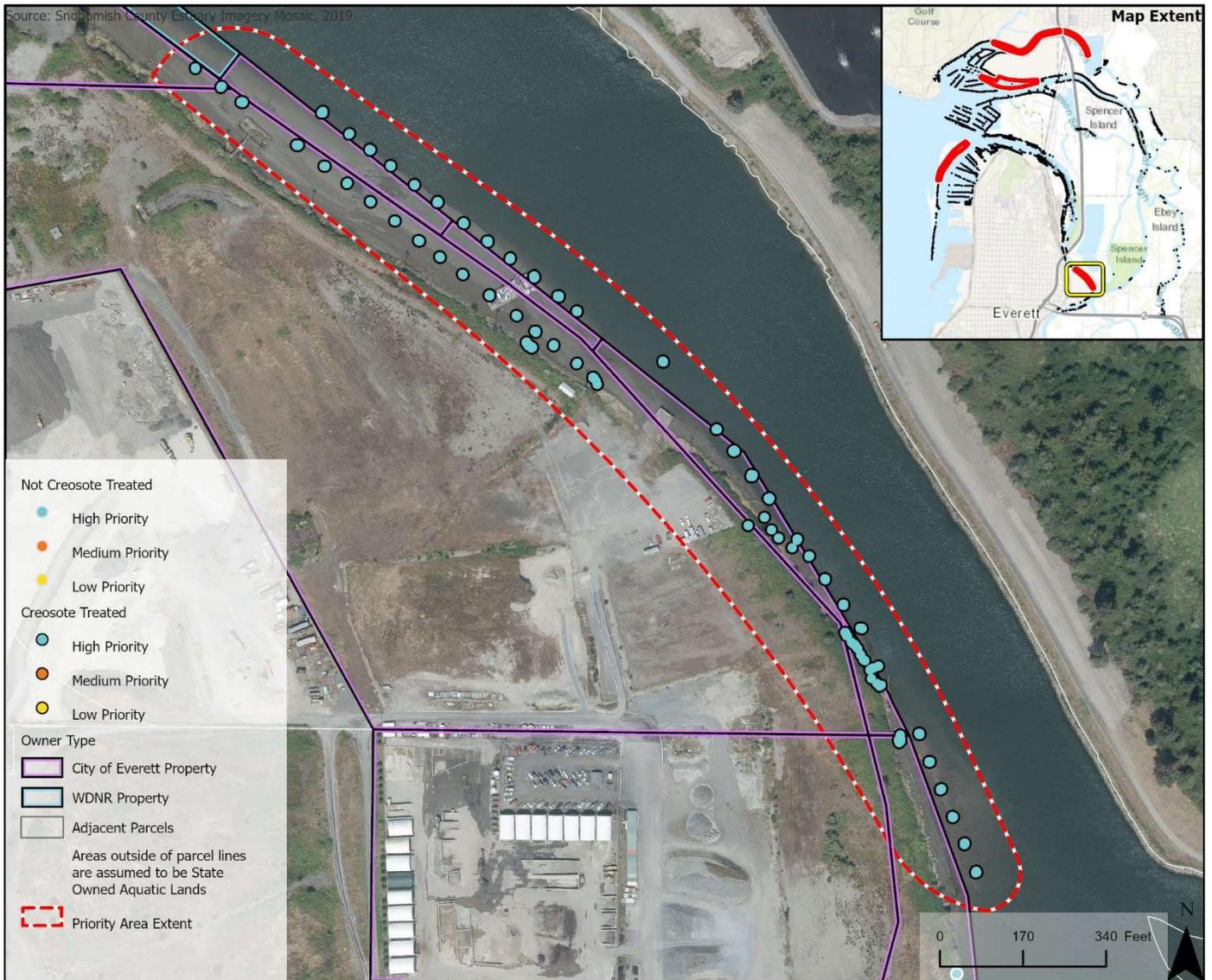
Pilings, whether creosote-treated or not, can affect estuary habitats. Just by occupying space, pilings reduce the availability of natural sandy habitats. Each individual piling can also affect a larger surrounding area through the scour effects of tidal water moving past the structure. When a piling is in salt marsh or other aquatic vegetation, this “halo effect” around the piling can result in decreased vegetation cover. Despite these negative impacts, pilings can provide habitat for birds and other aquatic invertebrate species, such as barnacles, which require hard substrate to grow on.

## Voluntary Project

This is a voluntary effort seeking willing landowners. If you would like to learn more about the project, please visit [www.snocomrc.org/projects/creosote-pilings](http://www.snocomrc.org/projects/creosote-pilings) or call Elisa Dawson, Snohomish MRC Staff at (425) 388-6466.



# Everett Public Works Yard



Statistics Summary		
213	213	0
Number of Pilings	Creosote Treated	Not Creosote Treated
Property Ownership		
City of Everett: 110		State Owned: 103
High Priority	Medium Priority	Low Priority
213	0	0



This project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency under Assistance Agreement [CE-01J65401]. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.