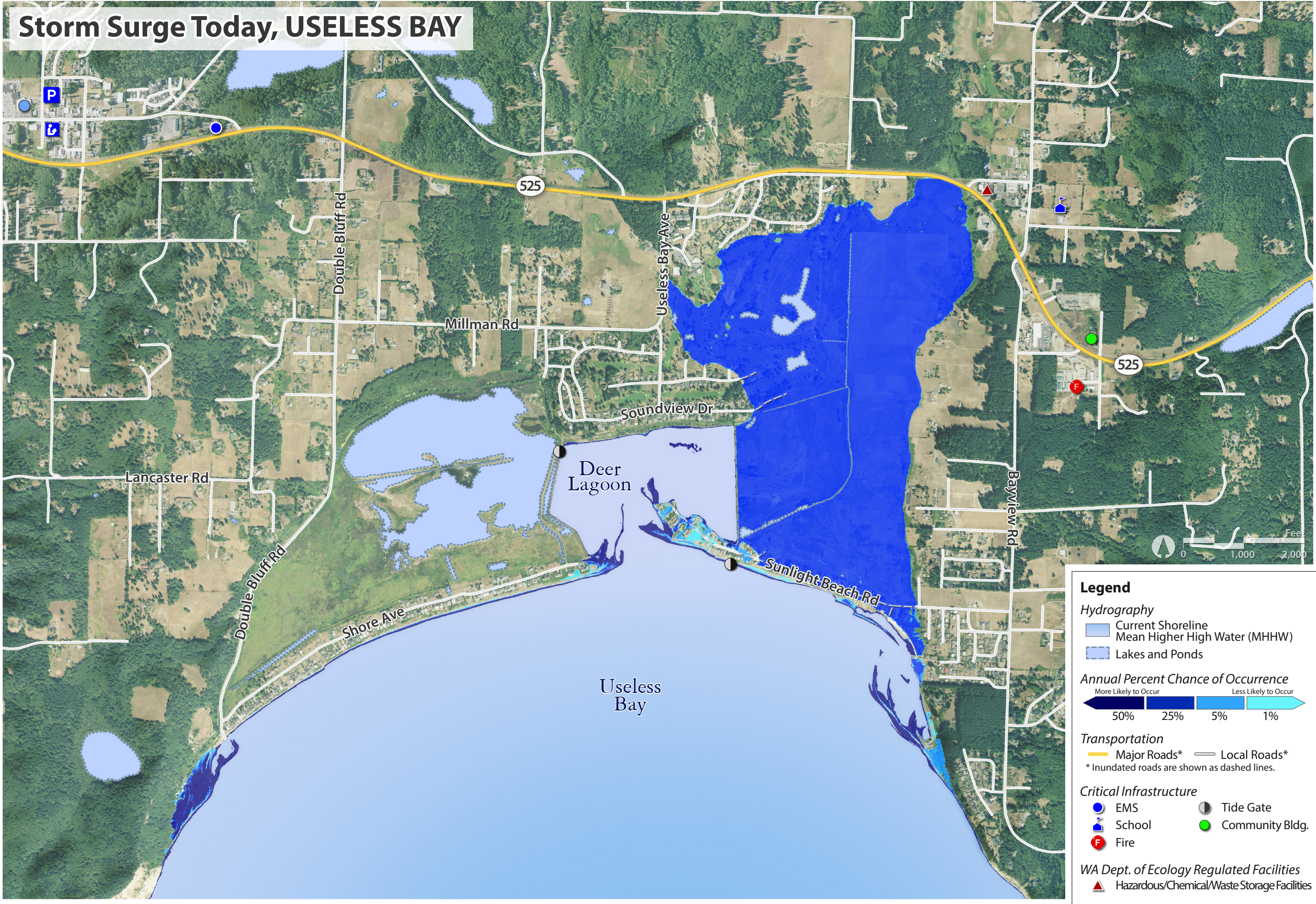




Storm Surge Today, USELESS BAY

Legend

Hydrography

- Current Shoreline
- Mean Higher High Water (MHHW)
- Lakes and Ponds

Annual Percent Chance of Occurrence

More Likely to Occur Less Likely to Occur

50% 25% 5% 1%

Transportation

- Major Roads*
- Local Roads*

* Inundated roads are shown as dashed lines.

Critical Infrastructure

- EMS
- School
- Fire
- Tide Gate
- Community Bldg.

WA Dept. of Ecology Regulated Facilities

- Hazardous/Chemical/Waste Storage Facilities

Notes

- The mapped "Current Shoreline" is the Mean Higher High Water datum, 1983-2001 epoch, as provided by the National Oceanic and Atmospheric Administration (NOAA).
- Maps use lidar-based elevation data from 2014 made available through the Puget Sound Lidar Consortium (PSLC). Accuracy of elevation data at individual sites has not been verified.
- Maps use only elevation data to map areas of inundation and do not model hydrology, subsurface flow pathways, or shoreline engineering.
- Maps do not reflect shoreline change or erosion.

Produced for:



Produced by:

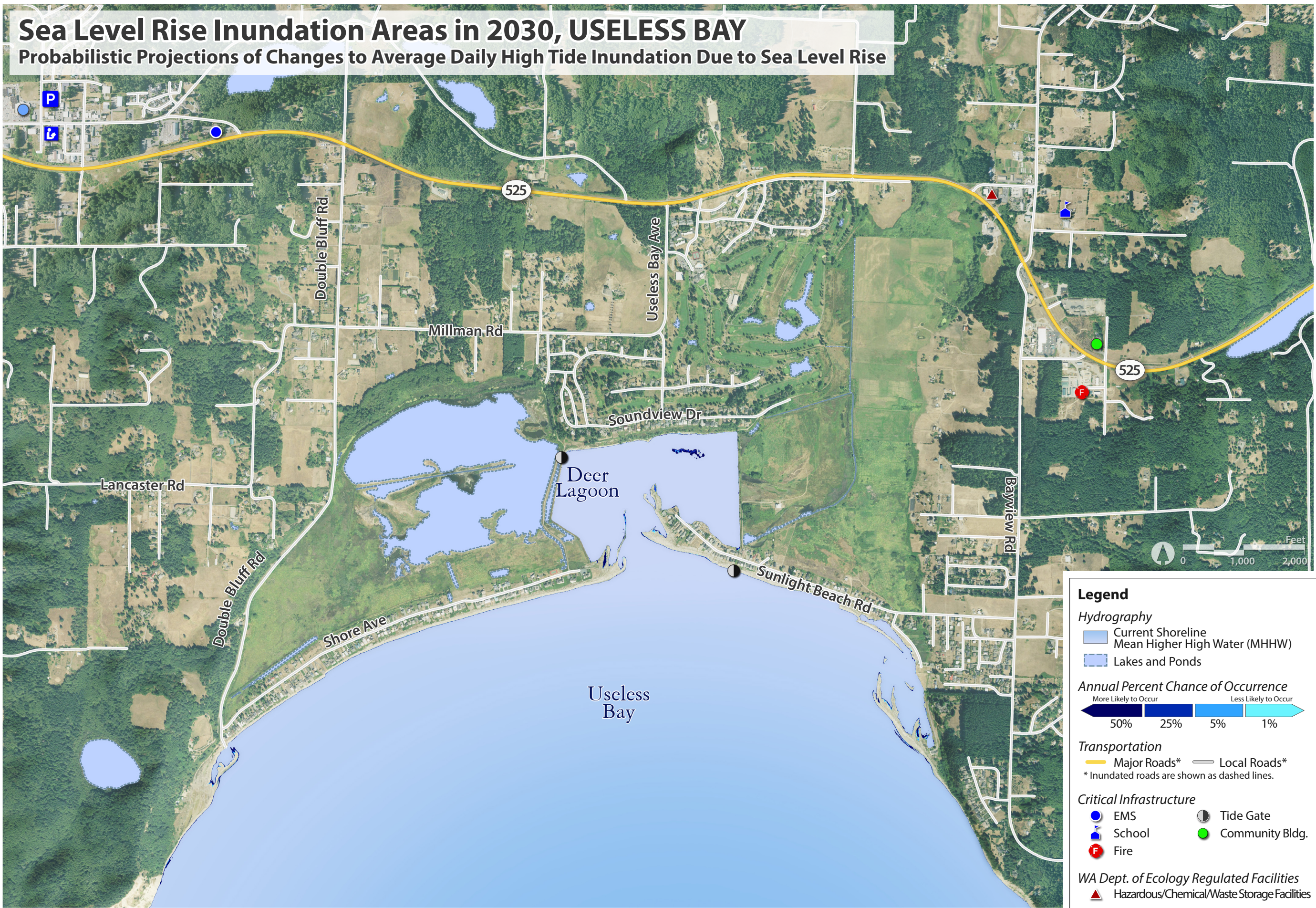


Funding Provided by:



Sea Level Rise Inundation Areas in 2030, USELESS BAY

Probabilistic Projections of Changes to Average Daily High Tide Inundation Due to Sea Level Rise



Legend

Hydrography

- Current Shoreline
- Mean Higher High Water (MHHW)
- Lakes and Ponds

Annual Percent Chance of Occurrence

More Likely to Occur Less Likely to Occur

50% 25% 5% 1%

Transportation

- Major Roads*
- Local Roads*

* Inundated roads are shown as dashed lines.

Critical Infrastructure

- EMS
- School
- Fire
- Tide Gate
- Community Bldg.

WA Dept. of Ecology Regulated Facilities

- Hazardous/Chemical/Waste Storage Facilities

Notes

- Sea-level rise projections based on Kopp et al., 2014 (Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites) for RCP 8.5, and adjusted for vertical land movement.
- The mapped "Current Shoreline" is the Mean Higher High Water datum, 1983-2001 epoch, as provided by the National Oceanic and Atmospheric Administration (NOAA).
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Produced for:



Produced by:



Funding Provided by:



Annual Extreme Storm Flooded Areas in 2030 with Sea Level Rise, USELESS BAY

Combined Probabilistic Sea Level Rise Projections and Annual Extreme Coastal Flooding Probabilities



Notes

- Sea-level rise projections based on Kopp et al., 2014 (Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites) for RCP 8.5, and adjusted for vertical land movement.
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- Maps do not reflect shoreline change or erosion.
- Maps do not reflect the additional flood risk associated with waves in elevating water level during storms (applies to the *Annual Extreme Storm Flooded Areas with Sea Level Rise* map only).
- Annual extreme flooding probabilities derived from historical data collected at nearby NOAA tide stations and do not take into account possible climate-related changes to storminess patterns.

Produced for:

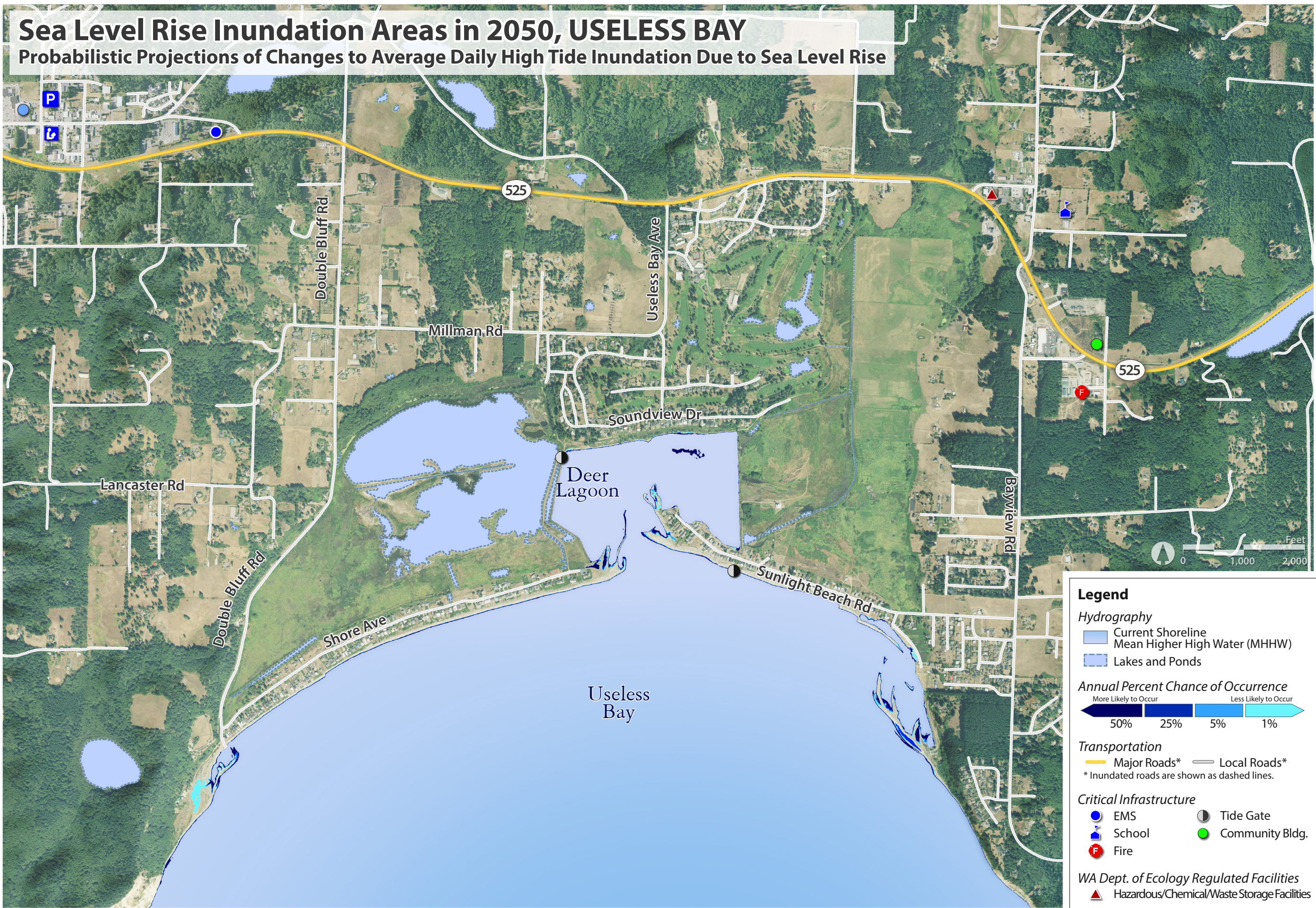


Produced by:



Sea Level Rise Inundation Areas in 2050, USELESS BAY

Probabilistic Projections of Changes to Average Daily High Tide Inundation Due to Sea Level Rise



Legend

Hydrography

- Current Shoreline
- Mean Higher High Water (MHHW)
- Lakes and Ponds

Annual Percent Chance of Occurrence

More Likely to Occur | Less Likely to Occur

50% 25% 5% 1%

Transportation

- Major Roads*
- Local Roads*

* Inundated roads are shown as dashed lines.

Critical Infrastructure

- EMS
- School
- Fire
- Tide Gate
- Community Bldg.

WA Dept. of Ecology Regulated Facilities

- Hazardous/Chemical/Waste Storage Facilities

Notes

- Sea-level rise projections based on Kopp et al., 2014 (Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites) for RCP 8.5, and adjusted for vertical land movement.
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Produced for:



Produced by:

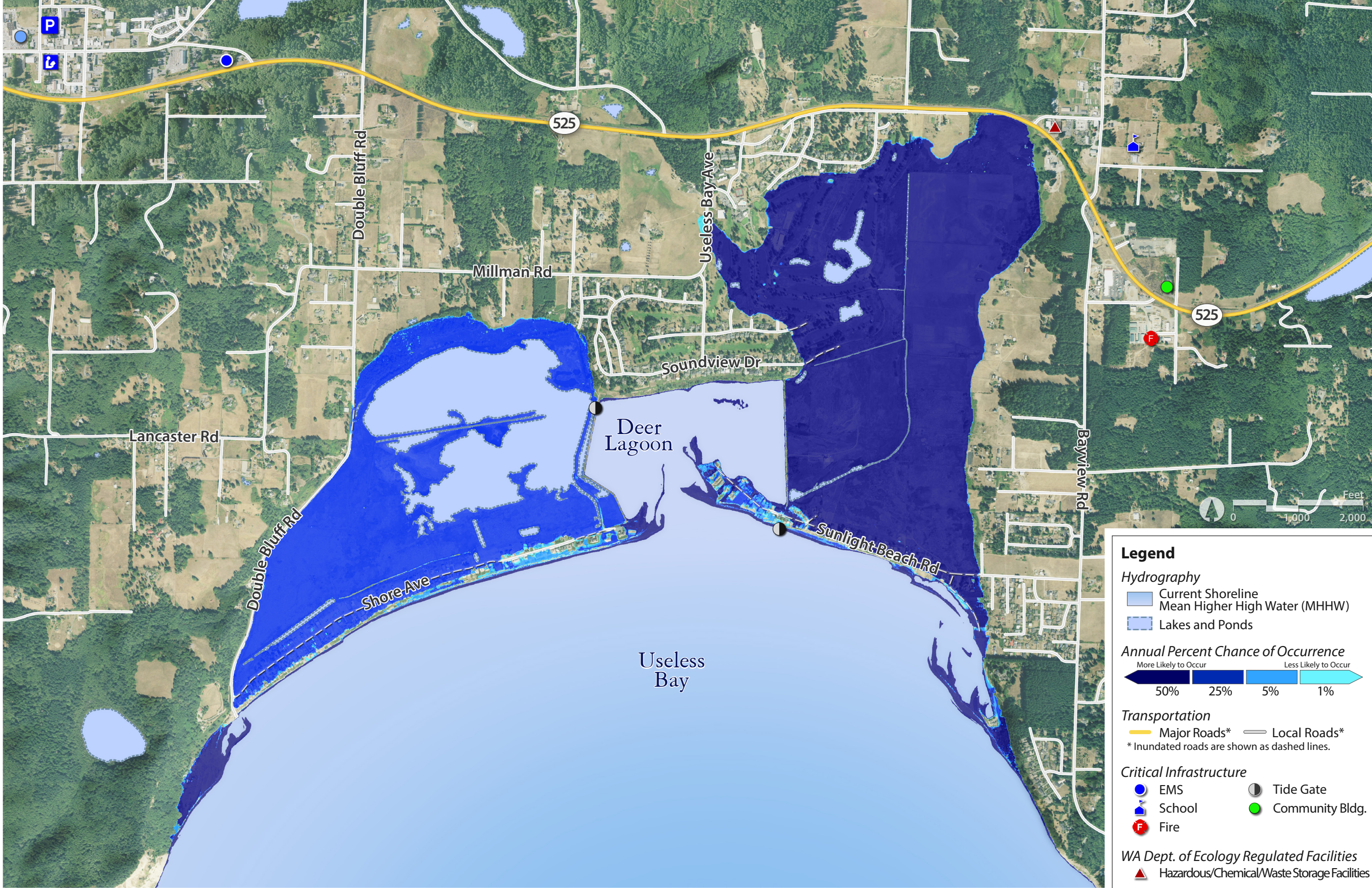


Funding Provided by:



Annual Extreme Storm Flooded Areas in 2050 with Sea Level Rise, USELESS BAY

Combined Probabilistic Sea Level Rise Projections and Annual Extreme Coastal Flooding Probabilities



Notes

- Sea-level rise projections based on Kopp et al., 2014 (Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites) for RCP 8.5, and adjusted for vertical land movement.
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Produced for:



Produced by:

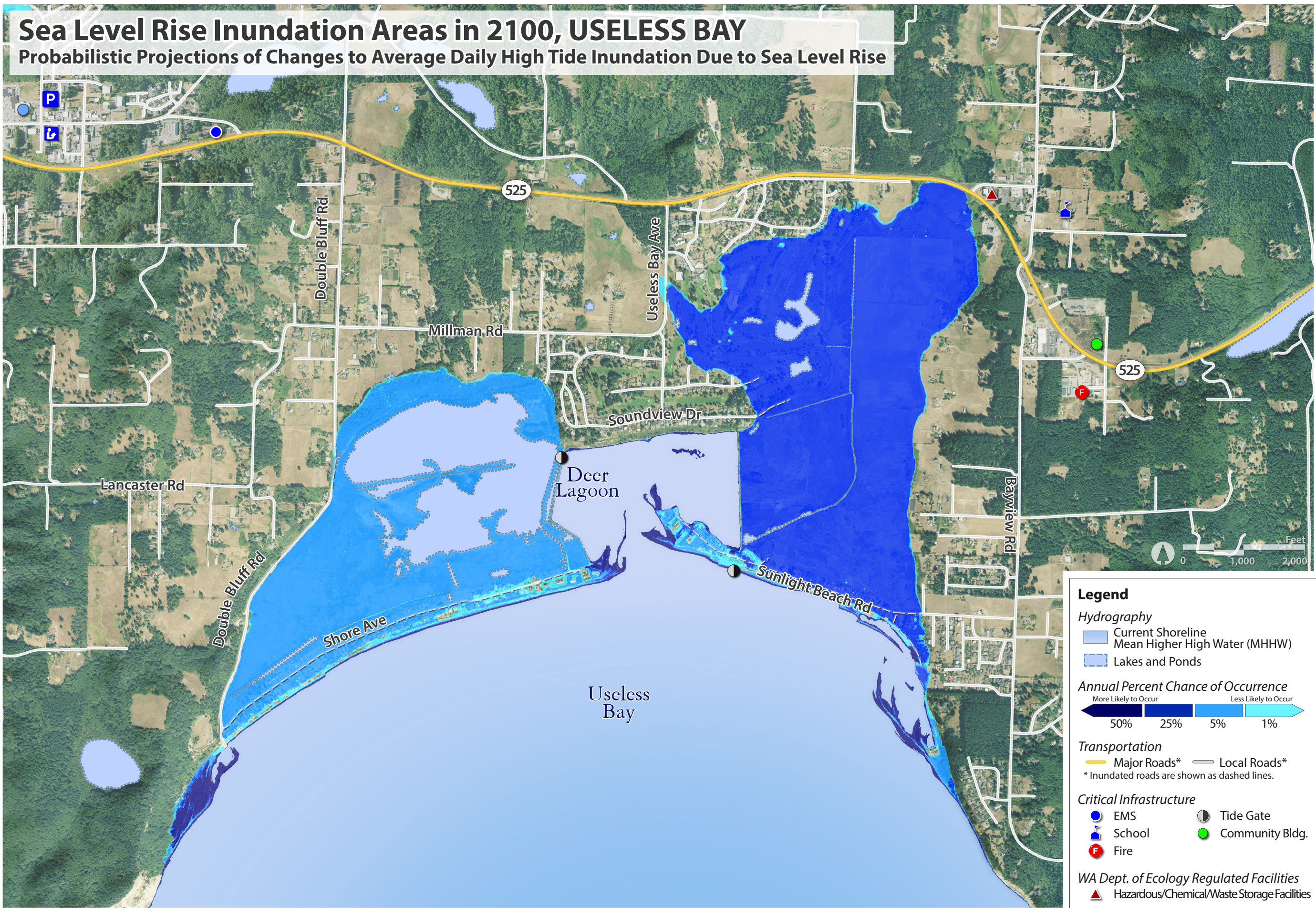


Funding Provided by:



Sea Level Rise Inundation Areas in 2100, USELESS BAY

Probabilistic Projections of Changes to Average Daily High Tide Inundation Due to Sea Level Rise



Legend

Hydrography

- Current Shoreline
- Mean Higher High Water (MHHW)
- Lakes and Ponds

Annual Percent Chance of Occurrence

More Likely to Occur Less Likely to Occur

50% 25% 5% 1%

Transportation

- Major Roads*
- Local Roads*

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Critical Infrastructure

- EMS
- School
- Fire
- Tide Gate
- Community Bldg.

WA Dept. of Ecology Regulated Facilities

- Hazardous/Chemical/Waste Storage Facilities

Notes

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Produced by:

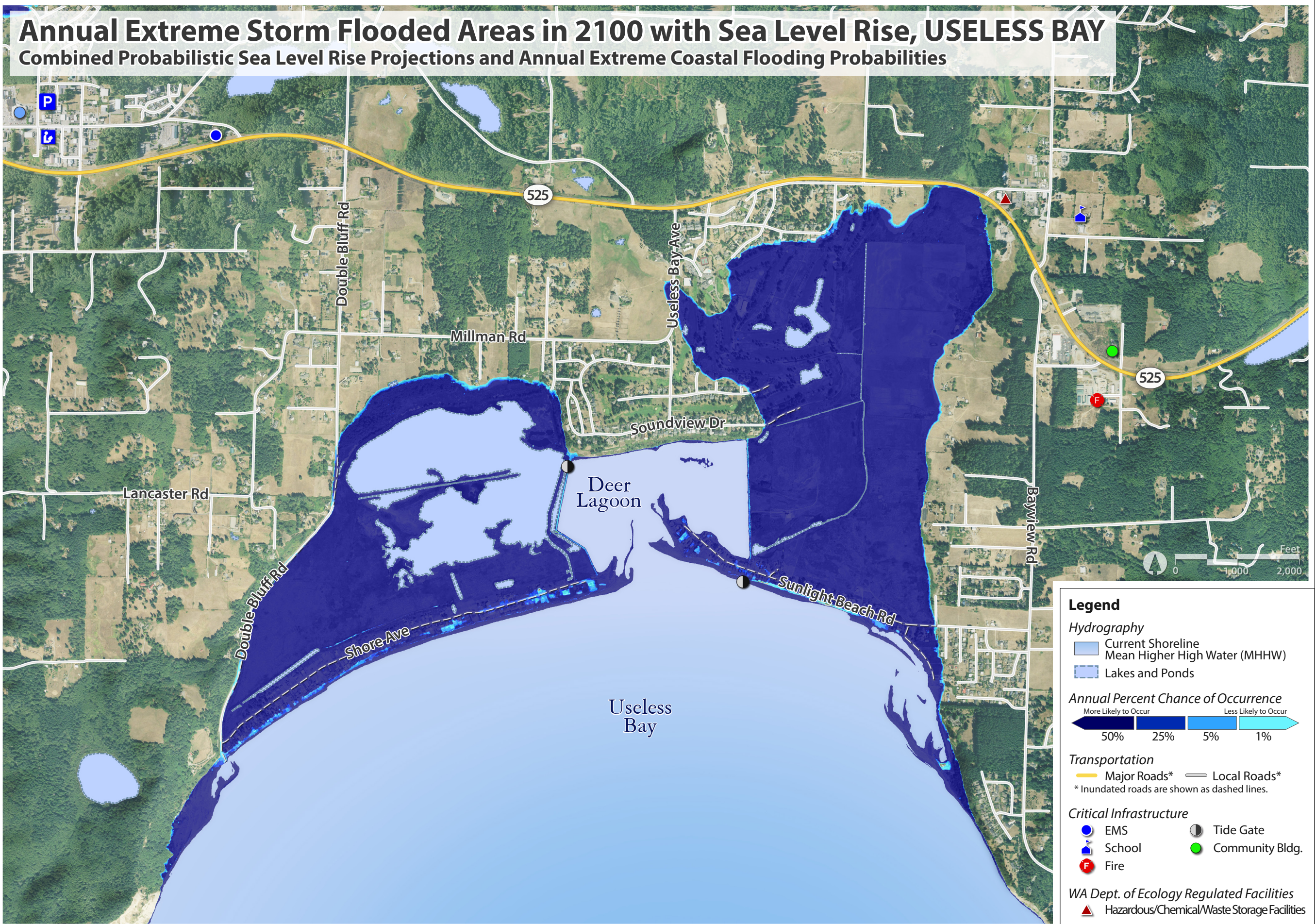


Funding Provided by:



Annual Extreme Storm Flooded Areas in 2100 with Sea Level Rise, USELESS BAY

Combined Probabilistic Sea Level Rise Projections and Annual Extreme Coastal Flooding Probabilities



Legend

Hydrography

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- Annual extreme flooding probabilities derived from historical data collected at nearby NOAA tide stations and do not take into account possible climate-related changes to storminess patterns.

Produced for:

Department of Natural Resources

Produced by:

adaptation international

Sea Grant Washington

Funding Provided by:

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

NOAA FISHERIES