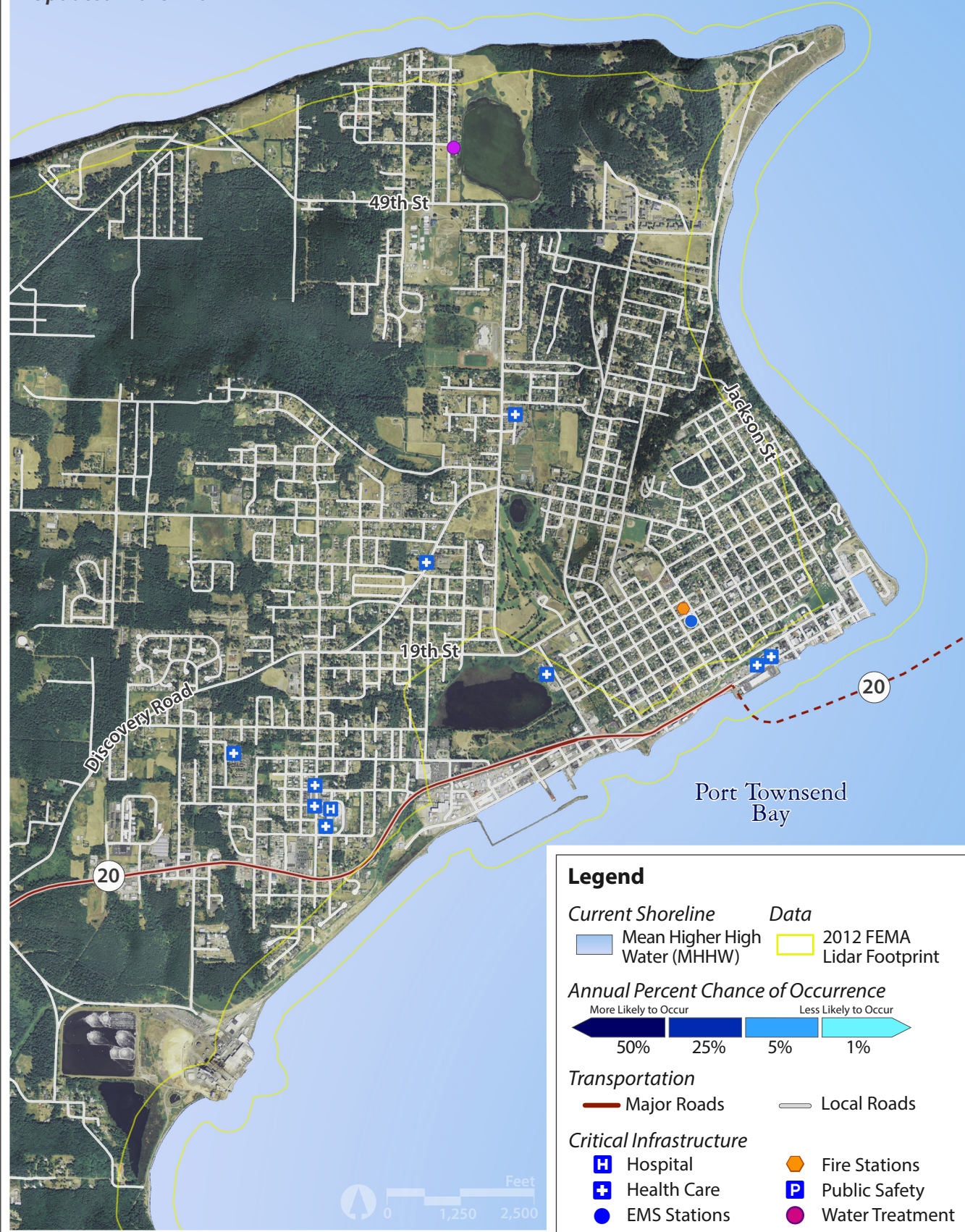


# Sea Level Rise Inundation Area in 2030, PORT TOWNSEND

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

Updated March 2017



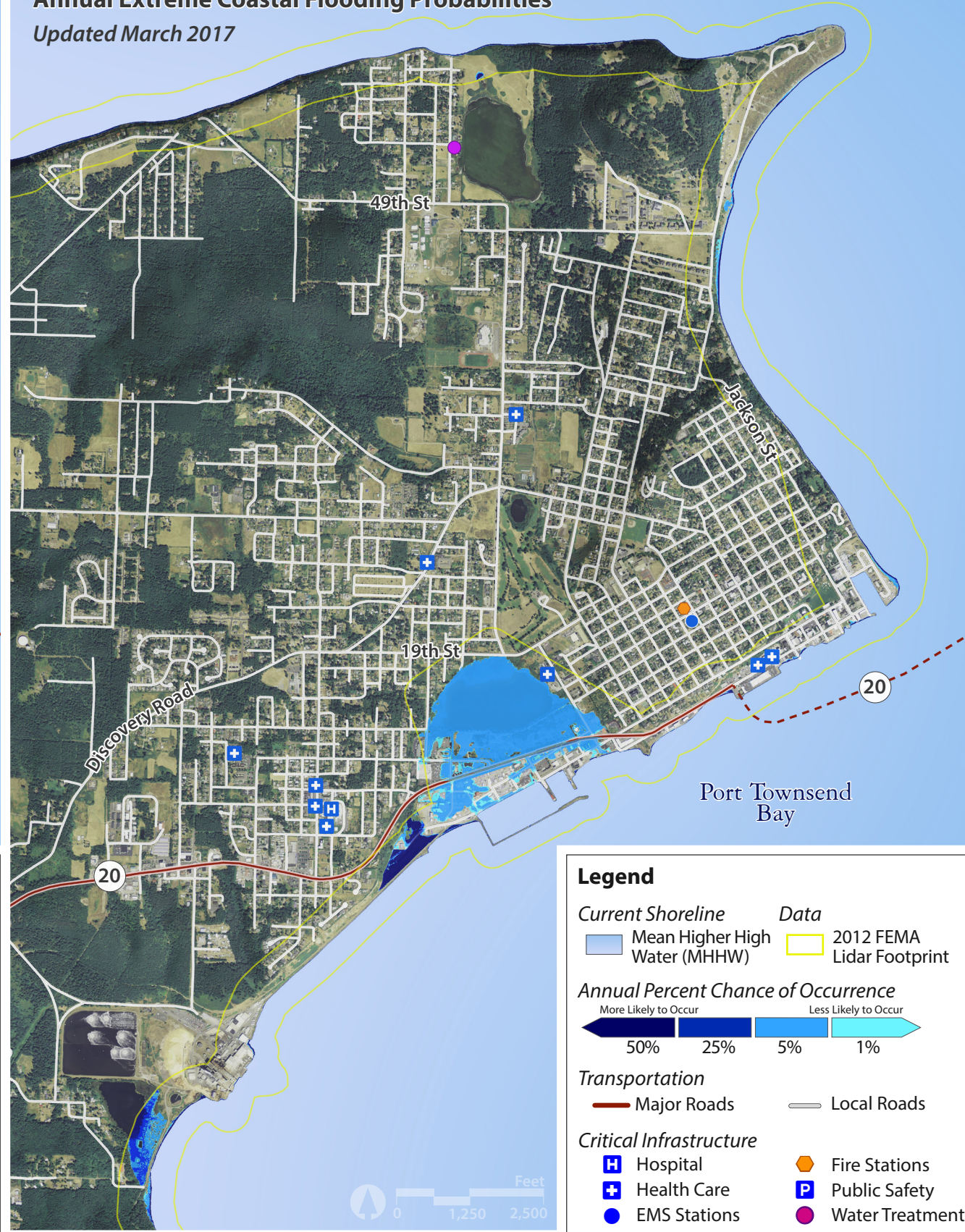
**Legend**

<b>Current Shoreline</b>	<b>Data</b>
Mean Higher High Water (MHHW)	2012 FEMA Lidar Footprint
<b>Annual Percent Chance of Occurrence</b>	
More Likely to Occur  Less Likely to Occur	
50% 25% 5% 1%	
<b>Transportation</b>	
Major Roads	Local Roads
<b>Critical Infrastructure</b>	
Hospital	Fire Stations
Health Care	Public Safety
EMS Stations	Water Treatment

# Annual Extreme Storm Flooded Areas in 2030 with Sea Level Rise, PORT TOWNSEND

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

Updated March 2017



**Legend**

<b>Current Shoreline</b>	<b>Data</b>
Mean Higher High Water (MHHW)	2012 FEMA Lidar Footprint
<b>Annual Percent Chance of Occurrence</b>	
More Likely to Occur  Less Likely to Occur	
50% 25% 5% 1%	
<b>Transportation</b>	
Major Roads	Local Roads
<b>Critical Infrastructure</b>	
Hospital	Fire Stations
Health Care	Public Safety
EMS Stations	Water Treatment

**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).
- Maps use lidar-based elevation data from 2012 (FEMA; shown in maps as yellow outline) and 2001-02 (all elevation data outside of the FEMA 2012 outline) 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, do not model hydrology, and do not reflect the influence of engineered shoreline structures, i.e. tide gates.
- 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 (applies to the Annual Extreme Storm Flooded Areas with Sea Level Rise map only).

Produced for:

NORTH OLYMPIC PENINSULA  
RESOURCE CONSERVATION & DEVELOPMENT

NOP RC&D

Produced by:



Funding Provided by:

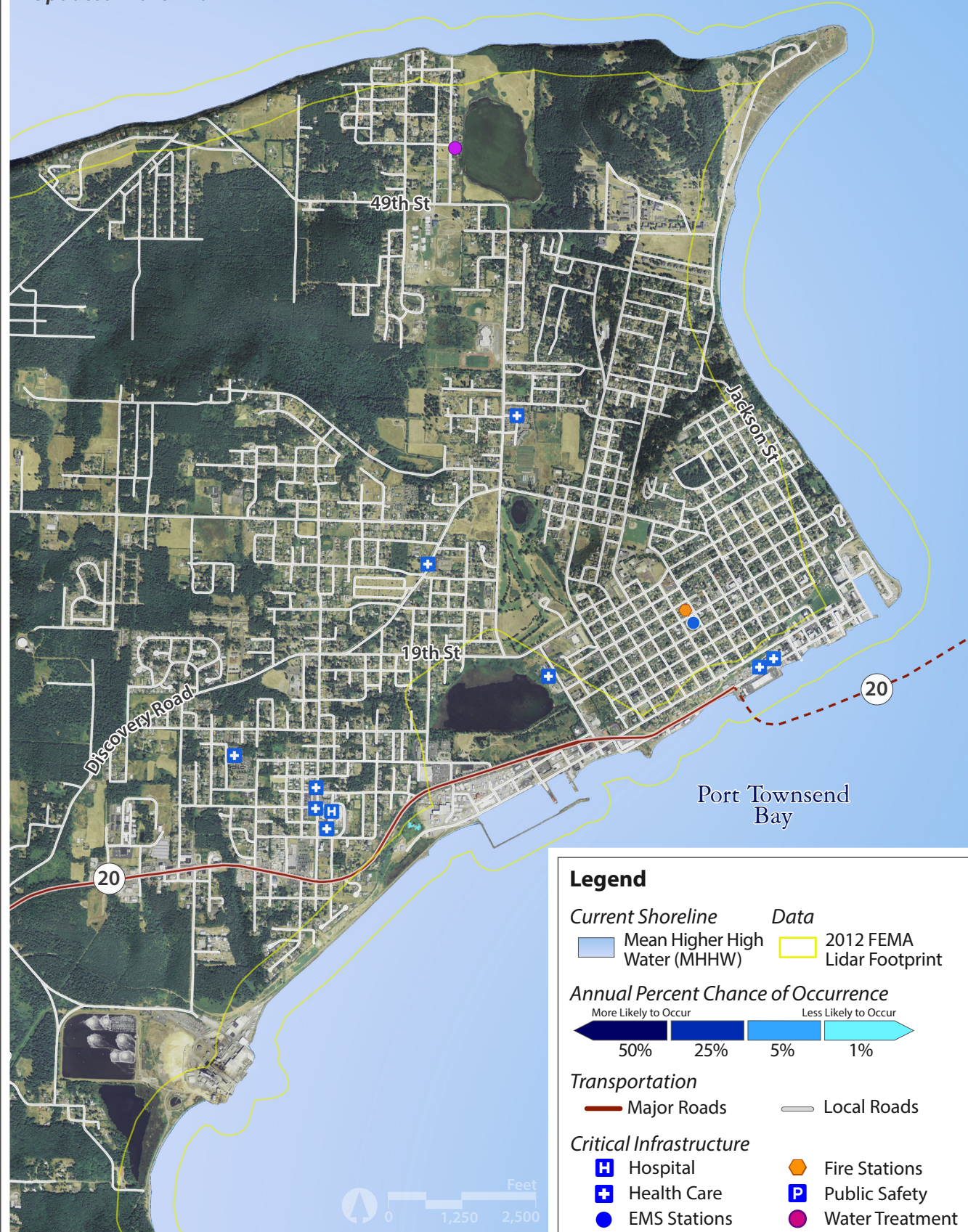




# Sea Level Rise Inundation Area in 2050, PORT TOWNSEND

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

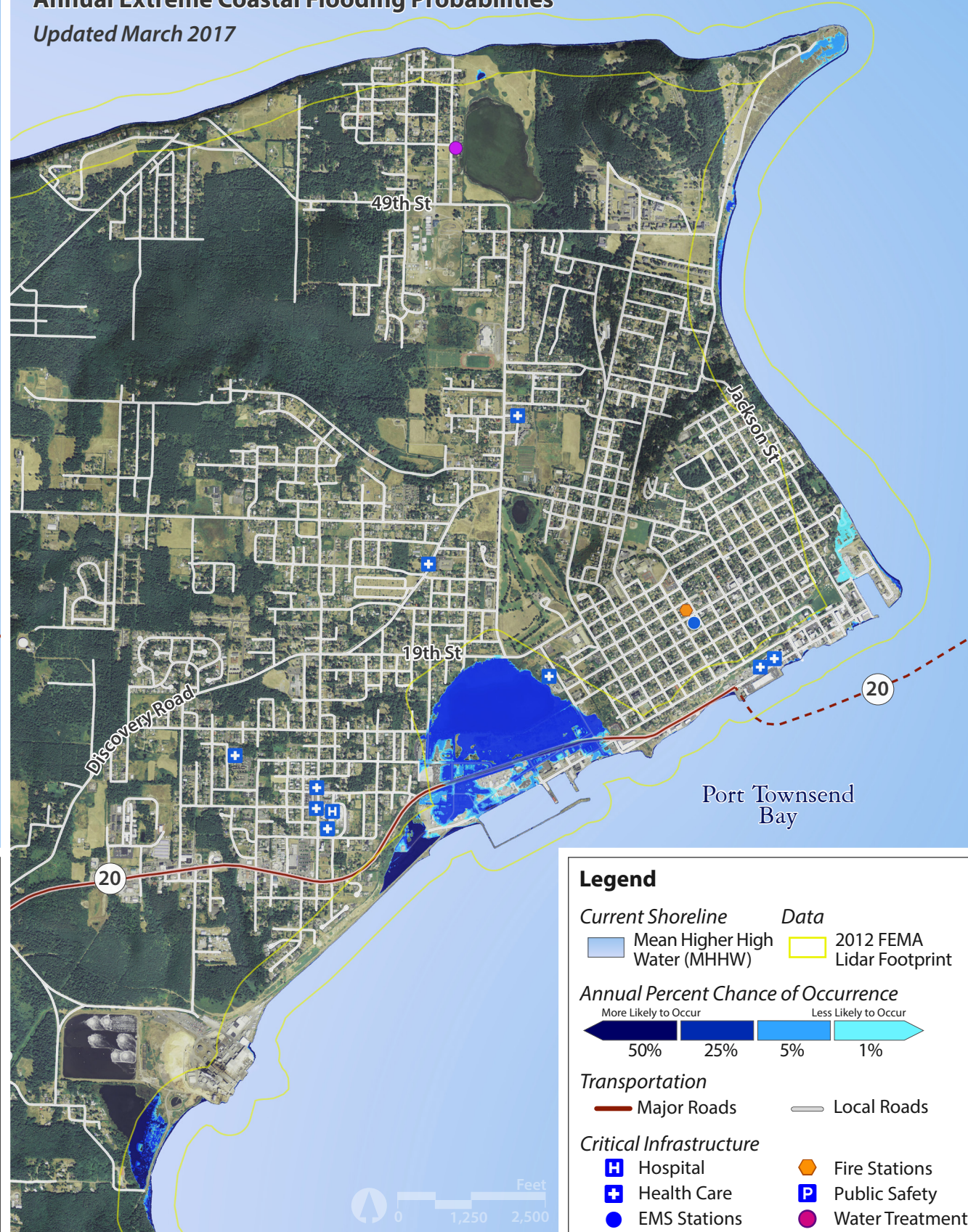
Updated March 2017



# Annual Extreme Storm Flooded Areas in 2050 with Sea Level Rise, PORT TOWNSEND

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

Updated March 2017



## 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).
- Maps use lidar-based elevation data from 2012 (FEMA; shown in maps as yellow outline) and 2001-02 (all elevation data outside of the FEMA 2012 outline) 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, do not model hydrology, and do not reflect the influence of engineered shoreline structures, i.e. tide gates.
- 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 (applies to the Annual Extreme Storm Flooded Areas with Sea Level Rise map only).

Produced for:

NORTH OLYMPIC PENINSULA  
RESOURCE CONSERVATION & DEVELOPMENT

NOP RC&D

Produced by:



Funding Provided by:

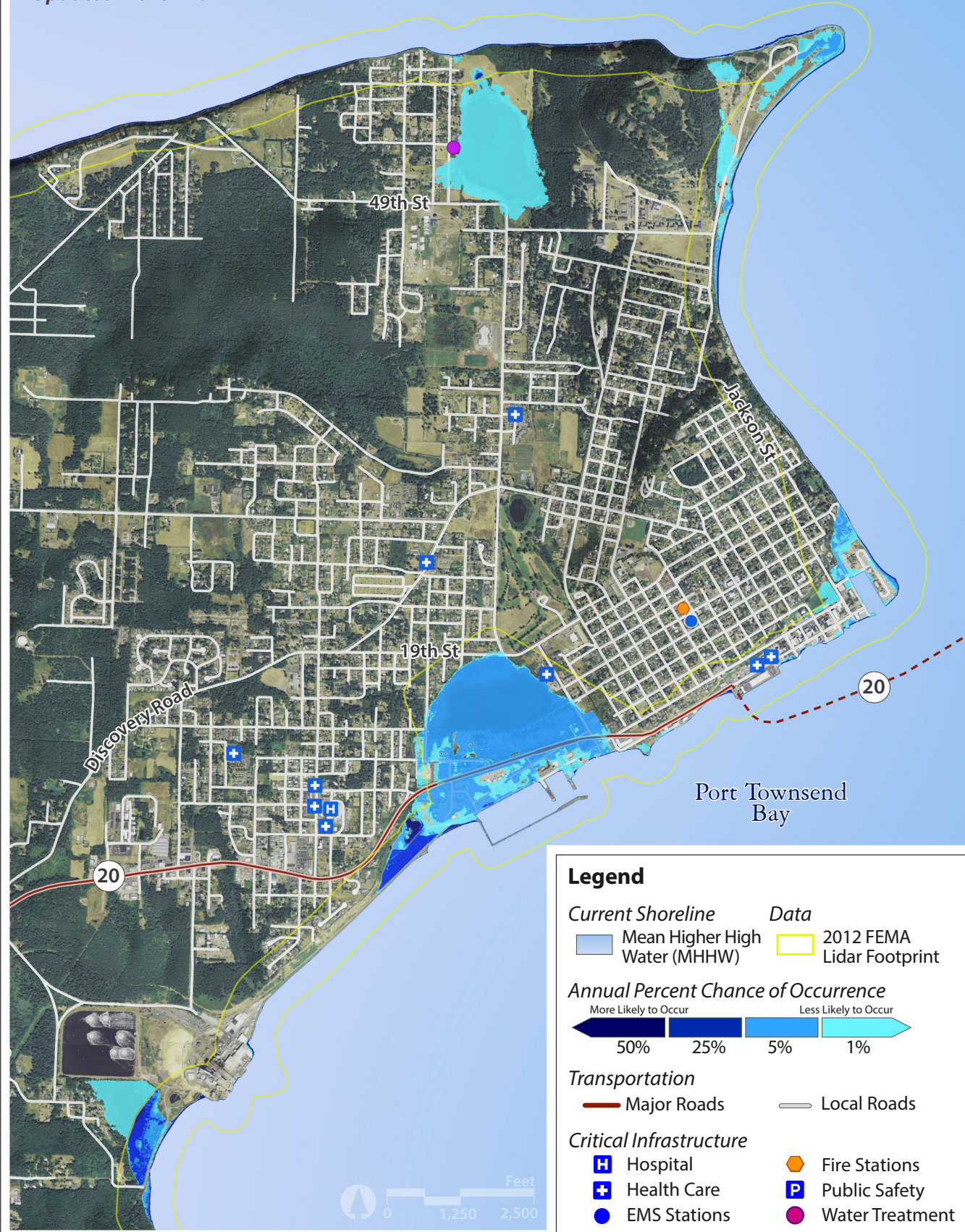




# Sea Level Rise Inundation Area in 2100, PORT TOWNSEND

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

Updated March 2017



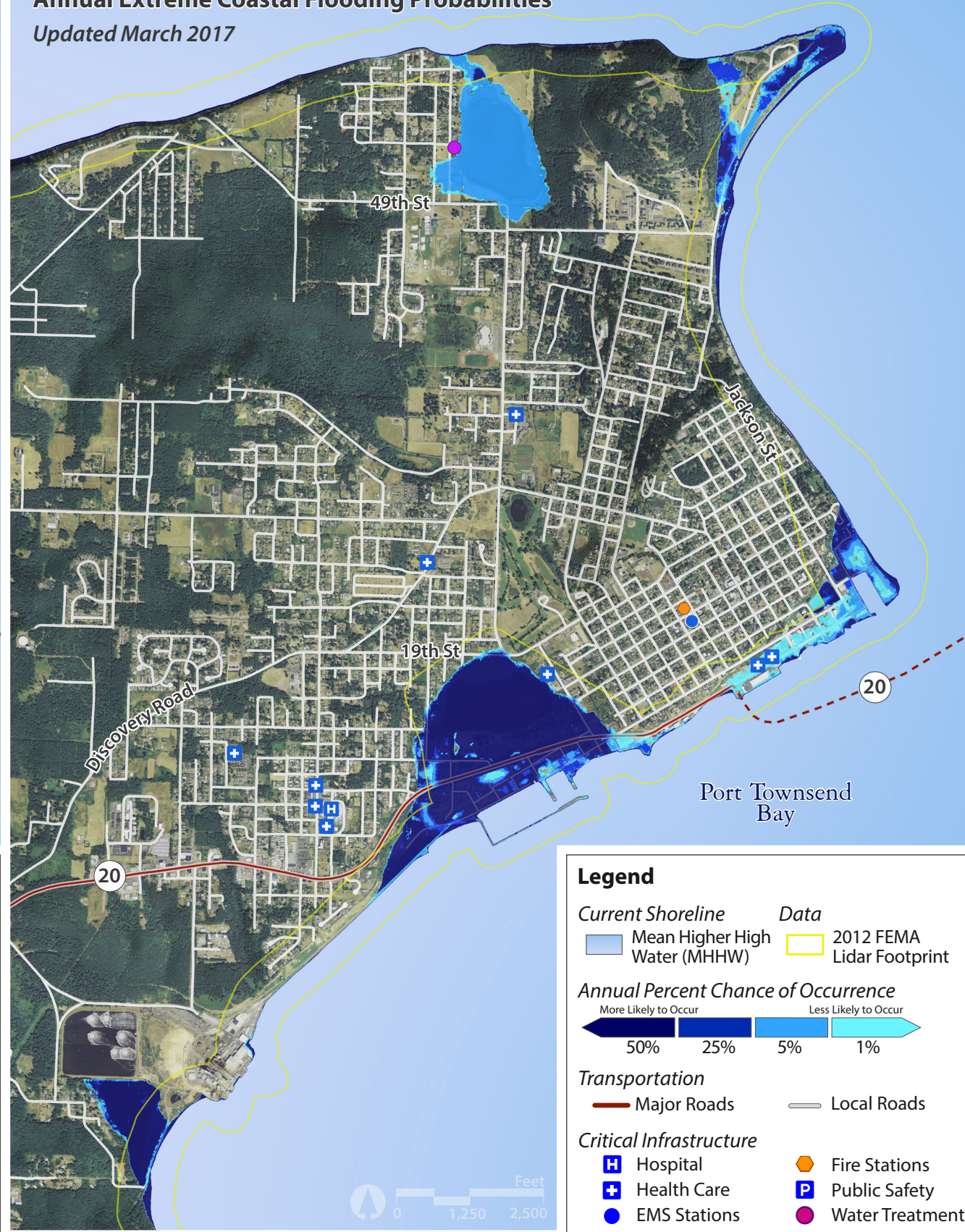
**Legend**

<b>Current Shoreline</b>	<b>Data</b>
Mean Higher High Water (MHHW)	2012 FEMA Lidar Footprint
<b>Annual Percent Chance of Occurrence</b>	
More Likely to Occur <span style="float:right">Less Likely to Occur</span>	
50% 25% 5% 1%	
<b>Transportation</b>	
Major Roads	Local Roads
<b>Critical Infrastructure</b>	
Hospital	Fire Stations
Health Care	Public Safety
EMS Stations	Water Treatment

# Annual Extreme Storm Flooded Areas in 2100 with Sea Level Rise, PORT TOWNSEND

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

Updated March 2017



**Legend**

<b>Current Shoreline</b>	<b>Data</b>
Mean Higher High Water (MHHW)	2012 FEMA Lidar Footprint
<b>Annual Percent Chance of Occurrence</b>	
More Likely to Occur <span style="float:right">Less Likely to Occur</span>	
50% 25% 5% 1%	
<b>Transportation</b>	
Major Roads	Local Roads
<b>Critical Infrastructure</b>	
Hospital	Fire Stations
Health Care	Public Safety
EMS Stations	Water Treatment

**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).
- Maps use lidar-based elevation data from 2012 (FEMA; shown in maps as yellow outline) and 2001-02 (all elevation data outside of the FEMA 2012 outline) 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, do not model hydrology, and do not reflect the influence of engineered shoreline structures, i.e. tide gates.
- 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 (applies to the Annual Extreme Storm Flooded Areas with Sea Level Rise map only).

Produced for:

NORTH OLYMPIC PENINSULA  
RESOURCE CONSERVATION & DEVELOPMENT

NOP RC&D

Produced by:  
**adaptation**  
international

**Sea Grant**  
Washington

Funding Provided by:

**Department of Commerce**  
Innovation is in our nature.