

## **Marine and Nearshore Ecosystems**

Strategy B7 Protect and restore marine and nearshore species

Page 21

Reducing the stress to marine life from low dissolved oxygen incidents should be a target as much as meeting the EPA human related dissolved oxygen drawdown target.

The largest source of nitrogen in Hood Canal is from the seawater entering the canal. There will still be periodic stress to the marine life even if all the nitrogen from human related sources were removed. As controlling the nitrogen from the ocean source is not possible, consideration should be given to reducing the phytoplankton after it grows, before it dies, sinks, decays and reduces the dissolved oxygen. It is recommended that a study be conducted to define potential natural approaches to reducing the phytoplankton. Consideration should be given to modifying the food web of the phytoplankton, zooplankton and forage fish, such as herring. Over harvesting of the herring in the past may have impacted the marine food web.

## **Wastewater**

Strategy C5 Prevent, reduce and/or eliminate pollution from decentralized wastewater treatment systems

Page 24

Complete the peer review of the Hood Canal Dissolved Oxygen Program report as soon as possible to support development of corrective actions. Define the amount of dissolved oxygen reduction resulting from the on site septic systems and human related surface runoff in lower Hood Canal. Define the amount of human related nitrogen reduction required to meet the 0.2 ppm dissolved oxygen drawdown target for lower Hood Canal.

## **Monitoring**

Strategy D4 Implement a strategic science and regional monitoring program that improves decisions about how to restore and protect Puget Sound.

Page 27

Continue the current marine water monitoring in Hood Canal using the ORCA buoys and monthly citizen monitoring. This monitoring is required to support corrective actions in determining the amount of human related nitrogen removal needed to meet the EPA dissolved oxygen drawdown target as well as to verify progress toward the target.