WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

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... now and forever

August 24, 2010

David Dicks, Executive Director
Puget Sound Partnership
P.O. Box 40900
Olympia, Washington 98504-0900

Dear Mr. Dicks:

I commend the Partnership for its recent adoption of a Dashboard of Ecosystem Indicators. Identification of indicators and associated targets is a critical step that will guide actions to protect and restore Puget Sound by 2020. In support of this important work, the Washington State Department of Natural Resources (DNR) has developed recommendations related to eelgrass, one of the twenty dashboard indicators and one of three indicators identified for fast-track development of targets needed for the Partnership's performance management system.

DNR has a strategic interest in eelgrass health due to its statutory role as manager of state-owned aquatic lands. DNR is steward of 2.6 million acres of state-owned aquatic lands and manages these lands for the benefit of current and future citizens of Washington State. Eelgrass (*Zostera marina*) is widely recognized as an important nearshore habitat in greater Puget Sound. When considering any project proposals to use state-owned aquatic lands, my staff assess potential impacts to aquatic resources, including eelgrass. In addition, my science staff conduct Sound wide monitoring of eelgrass and provide indicator results needed for the Partnership's State of the Sound report, as well as the Puget Sound Science Update.

DNR's recommendations are based on collaborative work between policy and science staff. Enclosed please find a copy of our science report, *Developing Indicators and Targets for Eelgrass in Puget Sound*. This report provides the scientific input to the development process. It was prepared over an 8 month period, which included consultation with your staff and an anonymous peer review refereed by the Partnership's Science Panel.

The work described in the enclosed science report has five components:

- Develop case studies of five other estuary programs with seagrass targets.
- Assemble all readily available information on historical and contemporary changes in eelgrass in greater Puget Sound.
- Compare different eelgrass indicators and metrics for use in Puget Sound.
- Develop alternative strategies for developing eelgrass targets and highlight key issues for each strategy.
- Identify a recommended strategy for consideration in policy discussions.

Key findings in this report include:

- Case studies from other estuaries found that aquatic vegetation area, and specifically eelgrass area, was commonly used as a measure of ecosystem health.

- All cases relied on historical condition as a central factor in setting seagrass targets. In some cases, developed areas that were considered non-restorable were subtracted from the historical abundance.
- Gains of up to 86% in seagrass area have been observed in estuaries where large historical losses were followed by management actions to address stressors. Tampa Bay seagrass increased by 27% in 24 years (1982-1986). Charlotte Harbor seagrass increased by 11% in 7 years (1999-2006). Chesapeake Bay submerged aquatic vegetation increased by more 86% in 25 years.
- There are currently no reliable Sound wide estimates of historical or potential eelgrass area for greater Puget Sound. Therefore, scientific information alone cannot be used to specify a numeric target.

DNR Recommendation for Numeric 2020 Ecosystem Target

DNR recommends that the Puget Sound Partnership adopt a 2020 target of increasing the areal extent of eelgrass by 20% in greater Puget Sound.

This target provides a concrete restoration goal that can guide management actions and that considers the best available scientific information. It seeks to increase eelgrass abundance because losses are known to have occurred in Puget Sound, and losses due to urbanization have been common in other estuaries. Based on the results seen in other estuary restoration programs, a 20% increase in 10 years would be aggressive, but not unprecedented.

We at DNR are committed to continuing our work to protect and restore eelgrass. Our land management decisions seek to avoid all impacts to existing eelgrass and to support restoration efforts. Our science staff is conducting additional analyses to further support target setting at the sub-basin scale and assembling information on historical and potential eelgrass distribution.

Conclusion

DNR looks forward to working with the Partnership to develop a strategy to achieve the target we recommend, increasing the areal extent of eelgrass by 20 percent over today's levels. We would welcome the Partnership's support for our budget request to develop a management plan for eelgrass in the 2011-2013 biennium. I look forward to speaking with you about these and other opportunities that will advance protection and restoration of the Sound and achieve its recovery by 2020.

Sincerely,

Peter Goldmark
Commissioner of Public Lands

cc: Martha Kongsgaard, Leadership Council Chair, Puget Sound Partnership