

Workgroup #2: Local Sources Reduction

Local Sources Reduction

Strategy #1: Support cooperative efforts to address major potential sources of nutrient pollution using combination of regulatory and non-regulatory programs and market mechanisms.

...6 actions

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Strategy #1: Support cooperative efforts...

- 1. Expand use of Pollution Control Action Teams** to respond quickly when areas are identified where water quality problems are threatening shellfish in order to prevent the downgrade of important tribal, commercial and recreational shellfish harvesting areas and reverse control the pollutions sources.

Strategy #1: Support cooperative efforts...

1. **Expand use of Pollution Control Action Teams** to respond quickly when areas are identified where water quality problems are threatening shellfish in order to prevent the downgrade of important tribal, commercial and recreational shellfish harvesting areas and reverse control the pollutions sources.
2. **Expand local and tribal pollution identification and correction (PIC) programs** to identify and assess local sources of nutrients and apply corrective actions using technical and financial assistance and when necessary enforcement mechanisms.

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- 2. Expand local and tribal pollution identification and correction (PIC) programs** to identify and assess local sources of nutrients and apply corrective actions using technical and financial assistance and when necessary enforcement mechanisms.
- 3. Support and encourage the use of effective, locally-based instruments** such as Clean Water Utilities, Shellfish Protection District, and Watershed Stewardship Program.

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Strategy #1: Support cooperative efforts...

- 4. Link various state and local funding programs** related directly or indirectly to water quality improvements, such as salmon restoration grants, water quality pollution grants, and federal conservation and restoration funds, and build a coordinated approach that optimizes multiple water quality outcomes and incentivize community and landowners contributions to success.

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- 4. Link various state and local funding programs** related directly or indirectly to water quality improvements, such as salmon restoration grants, water quality pollution grants, and federal conservation and restoration funds and build a coordinated approach that optimizes multiple water quality outcomes and incentivize community and landowners contributions to success.
- 5. Pilot nutrient credit trading** to promote cost-effective water quality protection and restoration in watersheds where nutrients are threatening shellfish and other organisms.

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5. **Pilot nutrient credit trading** to promote cost-effective water quality protection and restoration in watersheds where nutrients are threatening shellfish and other organisms.
6. **Encourage the use of Voluntary Stewardship Program and/or the Growth Management Act Critical Areas ordinance requirements** to implement land-use practices that enhance and maintain forest and agriculture lands and protect water quality.

Strategy #2: Reduce and control nutrients entering marine waters from wastewater treatment plants and other point source facilities.

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Strategy #2: Reduce and control nutrients entering marine waters from...point source facilities

- 1. Develop Total Maximum Daily Load (TMDL)** to identify sources of pollution (point and nonpoint sources), and determine associated wasteload allocations (point sources) and load allocations (nonpoint sources) to limit nutrient loads entering marine waters.

Strategy #2: Reduce and control nutrients entering marine waters from...point source facilities

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3. **Impose a no discharge zone in Puget Sound** from commercial and recreational vessels.

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2. **Implement actions / measures outlined in the TMDL** to correct the nutrient problem from point sources.
3. **Impose a no discharge zone in Puget Sound** from commercial and recreational vessels.
4. **Evaluate the applicability of the state of Maryland's Flush Fee**, which generates revenues for wastewater treatment plant upgrade.

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Strategy #3: Prevent, reduce and control nonpoint sources of nutrients from agricultural lands and practices, in areas where the delivery of nutrients are affecting shellfish organisms and may be exacerbating acidification

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Strategy #3: Prevent, reduce and control nonpoint sources

- 1. Develop and implement additional TMDLs or other water cleanup plans** (see actions under Strategy 1) in areas where the delivery of nutrients from agricultural lands and practices is affecting shellfish organisms and may be contributing to ocean acidification.

Strategy #3: Prevent, reduce and control nonpoint sources

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2. **Augment technical assistance, inspection and compliance capacity** to address nutrient on working farms.

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- 3. Implement effective water quality best management practices** using voluntary and incentive-based programs targeted to rural landowners, and owners of small-acreage and working farms.

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- 2. Augment technical assistance, inspection and compliance capacity** to address nutrient on working farms.
- 3. Implement effective water quality best management practices** using voluntary and incentive-based programs targeted to rural landowners, and owners of small-acreage and working farms.
- 4. Identify statutory gaps** by reviewing current laws related to nutrient/fertilizer management on agricultural lands, and if needed propose statutory fixes.

Strategy #4: Prevent, reduce and eliminate sources of nutrients from residential lands

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Strategy #4: Prevent, reduce and eliminate sources of nutrients from residential lands

- 1. Manage and control pollution from small on-site sewage systems and large on-site sewage systems** by expanding funding for on-site system maintenance, repair and replacement (explore option to fund a unified, self-sustained, low-interest loan program).

Strategy #4: Prevent, reduce and eliminate sources of nutrients from residential lands

- 1. Manage and control pollution from small on-site sewage systems and large on-site sewage systems** by expanding funding for on-site system maintenance, repair and replacement (explore option to fund a unified, self-sustained, low-interest loan program).
- 2. Evaluate and verify new/ improved technologies to reduce nitrogen in domestic wastewater systems** (The Dept. of Health with funding from Ecology is field testing new technologies; if proven effective and reliable, appropriate steps will be taken to develop guidance for these nitrogen-removal technologies for use in Washington).

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- 3. Prevent, control and manage stormwater flows from new development** (due to increases in impervious surfaces) **and promote proper use of fertilizer** for residential purposes.

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- 3. Prevent, control and manage stormwater flows from new development** (due to increases in impervious surfaces) and **promote proper use of fertilizer** for residential purposes.
- 4. Address stormwater problems through new technologies and innovative public-private partnerships** such as the Washington Stormwater Center.

Strategy #5: Expand monitoring of local anthropogenic sources (human-generated pollution) to improve our understanding of how they are contributing to further acidification in Washington marine waters

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- 2. Explore the use of low-cost sensors and electronic reporting systems** to measure and track nutrient loading from small sources, for example by measuring upstream and downstream potential sources or high-impact areas.
- 3. Create incentives for and utilization of data collection** by landowners and citizens.

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Discussion

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