



Bioassessment Update:
Washington State
Department of Ecology

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- Ecology is one of the entities that benefits greatly from collaboration.
 - PSSB provides data in a format ready to upload to Ecology's EIM database
 - Bioassessment tools
 - Provides us with status of streams across the state
 - Allows us to comply with the Governor's mandate to streamline sampling efforts
 - Data used in various other types of studies

Water Quality Assessment

- 4 external contributors + 3 internal projects
 - Clark County
 - King County
 - Snohomish County
 - Clallam County
 - Ecology Status and Trends
 - Ecology Ambient Biological
 - Ecology Deschutes Pilot Effectiveness Monitoring
- Approximately 600 sites
 - Approximately 1200 site visits

Water Quality Assessment

- Policy Updates – Only apply to data submitted to the WQA
 - Post 2012 WQA, data submitted for assessment should be collected following the data collection and lab sorting protocols outlined in Ecology's SOP
 - Data will be assessed using either Multimetric Models (PSSB BIBI for Puget Lowland region) or O/E Model if available

Listings in Washington

- 13 stream segments on 10 streams listed as impaired on the 2008 303(d) list for Washington

- Hylebos
- Wapato
- Chambers
- California
- Sumas
- Bagely
- Bell
- Casselary
- Ennis
- Peabody



- Next step – Stressor ID

Stressor Identification

- Indian Creek Study
 - Used biology (fish, macroinvertebrates, daphnia) to show stormwater influence on lower Indian Creek in Olympia
- Peabody Creek
 - Due for completion in Sept. 2013
 - Currently in the early phase
 - Habitat Destruction
 - Altered Flow Regime
 - Stormwater Influence

Effectiveness Monitoring

- Measures the improvement of a waterbody and if it has been brought into compliance with the state water quality standards
- Effectiveness Monitoring provides technical feedback to refine future plans for improvement
- Ecology has used biology (bugs and periphyton) to determine effectiveness of TMDL implementation since 2009

Stormwater TMDL Pilots

- Use biological information to evaluate progress in abating impacts from stormwater
- Pilot Stormwater TMDL projects on Squaticum and Soos Creeks relate physical and chemical factors altered by stormwater events with predictable biological responses

Salmon Recovery and Watershed Health

- Provides quantitative, statistically valid estimates of habitat and water quality that are important for policy and management decisions
- Biological data include fish and macroinvertebrates

Thanks!

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