

PREPARED FOR: Washington Stormwater Policy Advisory Committee, in report of same date

PREPARED BY: Michelle A. Girts and John Hoey/CH2M HILL

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The following is an abbreviated summary of the results of stakeholder interviews, asking the interview questions recommended by the Stormwater Policy Advisory Committee (SWPAC) at the July 11, 2000, meeting. Hence, these results reflect the views of the interviewees. The results are the basis for themes and potential recommendations to the 2001 Washington State Legislature. Where multiple respondents have agreed on a statement, this concurrence is noted.

### **1) Entities Responsible for Implementation/ Enforcement and Related Activities**

#### **Federal Agencies**

- U.S. Fish and Wildlife Service (USFWS) - Endangered Species Act (ESA)
- National Marine Fisheries Service (NMFS) - ESA
- Environmental Protection Agency (EPA) – Clean Water Act (CWA)

#### **State Agencies**

- Washington Department of Ecology (Ecology) – National Pollutant Discharge Elimination System (NPDES) permits, 401/Coastal Zone Management (CZM) certifications, Water Quality Standards
- Washington State Department of Transportation (WSDOT) – Highway Runoff Manual, NPDES permits, erosion control plans
- Washington Department of Fish and Wildlife (WDFW) – Hydraulic Protection Approval (HPA) program

#### **Counties**

- NPDES stormwater program components
- Growth Management Act (GMA)-driven ordinances

#### **Cities**

- NPDES stormwater program components
- Shorelines
- GMA-driven ordinances

## **2) Entities Responsible for Compliance and Related Activities**

### **State Agencies**

- Ecology - NPDES Phase 2, new U.S. Army Corps of Engineers (Corps) nationwide permits
- WSDOT - NPDES permits, HPA permits, 401/CZM certifications, ESA, Water Quality Standards, erosion control plans, stormwater contaminated sediments standards

### **Counties**

- King County - NPDES Phase 1, ESA, Total Maximum Daily Loads (TMDLs), Stormwater Technical Manual, Shoreline Management
- Pierce County - NPDES Phase 1, ESA, TMDLs, Water Quality Standards, Shoreline Management
- Snohomish County - NPDES Phase 1, ESA, TMDLs
- Spokane County - NPDES Phase 2, TMDLs, Stormwater Technical Manual, Shoreline Management
- Benton County - NPDES Phase 2, ESA, TMDLs, Stormwater Technical Manual
- Whatcom County - NPDES Phase 2, Shoreline Management

### **Cities**

- City of Seattle - NPDES Phase 1, ESA, TMDLs, Water Quality Standards, Shoreline Management
- City of Tacoma - NPDES Phase 1, TMDLs, ESA, Water Quality Standards, Stormwater Technical Manual, Shoreline Management
- City of Bellevue - NPDES Phase 2, ESA, TMDLs, Water Quality Standards, Shoreline Management
- City of Marysville - NPDES Phase 2, Water Quality Standards
- City of Yakima - NPDES Phase 2, TMDLs, ESA, HPAs, Shoreline Management
- City of Walla Walla - Erosion Control Plans, TMDLs, ESA, Water Quality Standards

### **Other Stakeholders**

- Association of Washington Business (represents small and large business and industry members) - NPDES, TMDLs, ESA, Stormwater Technical Manual, and others
- Washington Farm Bureau - NPDES
- Washington Public Ports Association - NPDES Phase 2, TMDLs, ESA, Water Quality Standards
- Washington Association of Water and Sewer Districts - NPDES, Water Quality Standards, Stormwater Technical Manual
- Association of General Contractors (AGC) - Erosion Control Plans, Stormwater Technical Manual
- Home-Builders Association - Stormwater Technical Manual, Erosion Control Plans

### **3) Stormwater Research and Monitoring Activities**

- Stormwater Best Management Practices (BMPs) effectiveness monitoring - WSDOT, Corps
- Center for Urban Water Resources is conducting research
- WSDOT - Testing/recommending use of experimental BMPs
- City of Seattle - Research/monitoring of ultra-urban stormwater management options (e.g., roof gardens)
- Association of Washington Cities - Annual survey of surface water utility programs, respective rate structures, and effectiveness
- Sellen Construction and Wilder (both contractors) have testing programs
- NPDES monitoring is occurring on dairy farms

### **4) Entities Currently Developing or Implementing Programs and Related Activities**

#### **State Agencies**

- WSDOT - ESA, TMDLs, Highway Runoff Manual, Stormwater Retrofits, Alternative Mitigation, stormwater grant program, erosion control plans
- WDFW - new HPA stormwater rules

#### **Counties**

- Benton County - NPDES Phase 2, ESA Section 4(d), TMDLs
- King County - ESA, Stormwater Technical Manual, NPDES, HPAs
- Pierce County - NPDES permit, ESA, TMDLs, alternative mitigation
- Snohomish County - Salmon Habitat Recovery, Master Drainage Planning to influence land use planning
- Spokane County Public Works - NPDES Phase 2
- Whatcom County - NPDES Phase 2, Shoreline Management Rules

#### **Cities**

- City of Bellevue - NPDES Phase 2, ESA
- City of Tacoma – Sanitary Sewer Overflow (SSO) regulations, NPDES permit
- City of Seattle - NPDES permit
- City of Yakima - ESA risk assessment, Shoreline Management Rules, Eastern Washington manual
- City of Walla Walla – Water Resources Inventory Area (WRIA) planning, updating GMA plan

#### **Other Stakeholders**

- American Public Works Association (APWA) - ESA, HPA, Stormwater Technical Manual – Western/Eastern Washington, Highway Runoff Manual, Stormwater Retrofits, Erosion Control Plans, Innovative Research, Funding for Technical Assistance and Surface Water Management Master Plans
- Association of Washington Business - NPDES Phase II, TMDLs, ESA, Water Quality Standards changes, Tri-County Plan, Watershed Plans, Stormwater Technical Manual, GMA, Shoreline Management Rules, stormwater retrofits, Contaminated Sediments Standards

- Water and Sewer Districts - ESA Section 4(d)
- Public Ports - NPDES Phase 2
- AGC is working with Washington Building Code Council to develop a chapter on grading and excavating and to address erosion control

## **5) Regulations Requiring Future Compliance**

- All of them! (multiple respondents)
- ESA (multiple respondents)
- NPDES Phase 2 (multiple respondents)
- TMDLs (multiple respondents)
- Shoreline Management Rules (multiple respondents)
- Whatever comes out of Tri-County process (multiple respondents)
- Water quality standards (multiple respondents)
- Ecology's new toxics policy (multiple respondents)
- Underground Injection Control regulations
- SSO regulations
- New Corps nationwide permits

## **6) Short-Term Priorities (Next Year)**

- NPDES, ESA 4(d) compliance (multiple respondents)
- Understanding who needs to comply with NPDES Phase 2 and what requirements are (multiple respondents)
- Programs for compliance with NPDES requirements (multiple respondents)
- Tri-County ESA/Stormwater (multiple respondents)
- Highway Runoff Manual
- Instituting stormwater retrofits (multiple respondents)
- Eastern Washington stormwater manual (multiple respondents)
- TMDLs (multiple respondents)
- Establish risk-based, area-specific stormwater programs (multiple respondents)
- HCP for HPA permit program
- Mitigation review
- Salmon Recovery Planning, Master Drainage Planning, implementing findings
- Capital improvement projects
- Water quality, contaminated sediments, vegetated buffers
- Funding for construction of regional stormwater facilities
- Identifying primary regulations that lead to compliance with others
- Developing programmatic approach to meet Corps 404 regulations and for biological assessments, using roof systems, fencing, and erosion control as building blocks
- Do a survey of construction industry-related stormwater costs
- Pretreatment drywell standards, acceptance, and use
- Fish passage barriers in stormwater culverts
- Subdivision design standards for private development

- Association of Washington Business - industries respond to individual regulatory requirements as they come up; develop individual programs/solutions; reactive approach - not able to look out very far; would like to understand the big picture to do strategic planning for stormwater regulations

## **7) Long-Term Priorities (Next 3 Years)**

- “Can’t see that far in the future” (multiple respondents)
- NPDES compliance (multiple respondents)
- ESA compliance
- How to minimize stormwater impacts from highways
- Eastern Washington Stormwater Manual
- WDFW HPA Habitat Conservation Plan (HCP)
- BMPs
- 2514 watershed plans and implementation
- Holistic water resource management program – integration of storm/surface water, water supply, and wastewater treatment
- Better enforcement of regulations

## **8) Major Components of Priority Programs**

- “Can’t predict what we’ll be doing due to uncertainty with the regulations” (multiple respondents)
- NPDES Phase 2
- ESA audit
- ESA BMPs
- ESA-friendly operations and management (O&M)
- Technical standards
- Maintenance standards
- Enforcement
- Source control
- Major capital projects
- Public education/outreach
- Inter-governmental coordination

## **9) Actual/Projected Costs of Priority Programs**

- Hard to quantify actual costs (multiple respondents)
- Will require additional staff (multiple respondents)
- Estimated construction costs will go up 30 percent as a result of stormwater regulations
- Innovative approaches to stormwater would reduce costs of treating stormwater
- EPA method for NPDES Phase 2 communities - fixed (administrative, record keeping, reporting) cost of \$1,525 and variable (annual operations of six minimum BMPs) cost of \$8.93 per household (no infrastructure capital costs included)

- National Association of Flood and Stormwater Management Agencies (NAFSMA) survey - Phase II communities spend upwards of \$4,000 per square mile, or an average of \$2.76 per capita on stormwater programs.
- WSDOT - estimated approximately \$11 million for stormwater operations and maintenance during the 2001-2003 biennium
- WSDOT - Does not include capital costs. Stormwater costs are included in individual capital project budgets - ranging from 8 to 20 percent of project depending on type and location
- Estimated \$1 billion during next 10 years for Washington cities and counties
- County - Estimated approximately \$4 million during 8 years for Phase 1, 4(d) stormwater
- County - \$1 million (actual) for staffing Salmon Recovery and Master Drainage programs; both will increase another \$1 million this
- County - Capital costs: \$1 million to \$2 million in infrastructure, \$3 million in habitat projects
- County - Projected need for \$6 million for NPDES and \$6 million for ESA compliance (Pierce County)
- County - Capital costs: \$65 million over 20 years for regional stormwater facilities
- City - Estimated \$10 million to \$15 million/year, not including capital (another \$15 million to \$20 million)
- City - SSO regulations will cost \$68 million
- City projected stormwater program costs
  - \$3.4 million annually for NPDES Phase 2
  - \$6 million for ESA capital, \$4 million for stormwater capital
  - \$500,000 on development of stormwater manual and standards; \$10,000 to \$15,000 on technical advice
- Association of Washington Cities – 25 percent of each transportation project budget goes toward stormwater
- Association of Washington Business - costs to industry could be in the millions of dollars per facility; if feasible, retrofitting a typical 5-acre industrial site for infiltration could cost \$300,000 to \$500,000 for capital costs, and \$10,000 to \$20,000 annually for O&M

## **10) Funding Options for Priority Programs**

- Stormwater fees collected will have to be raised (multiple respondents)
- Current drainage rates
- User fees
- Permit fees
- General funds
- Bonds and loans
- Fines
- Grants
- Intergovernmental transfers
- Developing stormwater utility or establishing regional management solutions are two of numerous Phase II approaches
- Some programs match particular types of fees with specific activities

- WSDOT may fund additional stormwater costs through:
  - Gas tax
  - Blue Ribbon Panel determination
  - Budget additions currently being sought
  - Federal highway funds
  - Limited grants
  - Leveraging and cost-sharing
- No plans to raise new funds
- Real estate excise tax for capital, habitat costs
- Stormwater utility would be created; potentially raise water, irrigation, sewer rates
- Capital costs will be funded through higher rates
- Should be funded through local governments (fees, bonds)
- All possible funding sources should be explored
- Regional programs may require other funds
- Businesses will take stormwater program costs out of profits, which may drive businesses out-of-state; there is a lot of interest in funding options, such as low-interest loans and tax strategies

## **11) Major Concerns with Stormwater Regulations/ Programs/Activities**

- Concerns with all of them: How to fund a comprehensive program? (multiple respondents)
- What are the requirements? When to comply? How much will it cost? How to fund it? (multiple respondents)
- ESA requirements increase the difficulty of getting permits for drainage and water quality projects (multiple respondents)
- Uncertainty with implementation of TMDL requirements for stormwater; integration with NPDES, ESA (multiple respondents)
- Compliance with CWA and other requirements costs a lot of money – unfunded mandate
- Too many complex laws/programs
- Lack of strategic coordinated streamlining approach
- Need more staff and money for enforcement
- GMA, stormwater, watershed needs conflict
- Burden of compliance is absorbed into transaction costs
- ESA and Tri-County plan could have huge costs and legal risks
- Questionable benefit of investing in compliance programs
- May be conflicts between traditional BMPs and TMDLs
- TMDLs – how much of a role will WSDOT have before implementation? How to factor stormwater in with other pollutants?
- Ecology’s 402 program does not have teeth to meet 401 water quality certification standards
- WDFW regulating stormwater through HPA process (no legal authority or staff)
- Duplication of regulatory efforts with Ecology

- Secondary and indirect impacts from transportation projects to salmon habitat (as required by ESA Section 7)
- ESA, NPDES, TMDL regulations overlap
- Stormwater sediments standards and DNR aquatic lands leases
- Responsibility/liability for compliance is not clear in all cases
- Shorelines regulations, currently in revision – 300-foot buffer applies to site erosion control and has not been thoroughly evaluated
- Some concern that ESA requirements will slow construction because of uncertainty about regulations, liability, and cost
- AGC resists idea that any agency has statutory authority to force habitat acquisition or restoration
- No human health standards for contaminated sediments
- Ecology has no land use authority
- Stormwater programs can only slow the degradation of water resources and habitat
- NPDES focus is on discharges to surface water; Spokane County has mostly dry wells discharging to groundwater; how to comply with underground injection control program?
- Stormwater program costs erode industries' competitive edge; all businesses should be on a level playing field; cost-benefit analysis should prove the benefit of stormwater programs
- How to pay for required programs and capital investments, and how to convince constituents to pay for them?
- Political acceptance of restrictions on development
- Appropriate BMPs (dry wells, biofiltration swales)
- Erosion and sediment control – construction site runoff
- Ecology's stormwater discharge regulations based on in-stream standards greater than EPA's – no funds appropriated to cover additional sampling needed for implementation and enforcement
- Stormwater is not a major concern in the dry inland basin region– agencies should prioritize environmental concerns for wisest use of limited resources
- NPDES Phase 2 program's limited scope prevents it from being effective

## **12) Effectiveness of Stormwater Programs**

- Hydrology is always “degraded,” even with detention. Not achieving ESA and CWA goals (multiple respondents) Stormwater management is reactionary, project-specific; constrained by archaic regulatory, media-based focus
- WSDOT stormwater programs are somewhat effective - putting a lot of treatment BMPs in projects, but lack adequate scientific data
- Nobody (even EPA) has been able to demonstrate total effectiveness of stormwater programs (including NPDES); no demonstrable results nationwide
- 85 percent effective
- Effective due to focus on pollution prevention

- Water quality standards are not being met. Mitigation can only reduce impacts, not eliminate them
- Water quality treatment and infiltration could be improved
- Hard to determine effectiveness; stormwater is a new responsibility
- Do not have a stormwater program – only 7 inches of rain a year
- Does NPDES compliance ensure compliance with state laws?
- Farmers are effective at stormwater management – NPDES control on dairy farms, soil retention, etc.
- Stormwater has traditionally been transportation-related. There is no money for enforcement

### **13) Gaps (Resources, Policy) or Barriers to Success in Stormwater Activities**

- Not enough time, funding, personnel, or technology to meet all of the requirements (multiple respondents)
- Not enough staff in Ecology stormwater program (multiple respondents)
- Need a lot better monitoring data and resources on BMP effectiveness, maintenance (multiple respondents)
- No linkages between GMA and watershed planning. Lack of political will to link multiple local programs together. Ecology has no land use authority (multiple respondents).
- Many unknowns about program requirements (e.g., NPDES Phase 2)
- Lack of good science on stormwater issues
- Have not identified the problem, so cannot come up with a solution
- Unclear on regulatory requirements
- “One size fits all” approach does not work for many jurisdictions
- Many stormwater programs are unfunded mandates
- Lack of leadership from state - multiple agencies have different priorities/perspectives
- Not enough guidance from NMFS on ESA compliance
- Need more staff for enforcement
- Regulations and programs are splintered (e.g., ESA, CWA) – agencies are fighting with each other, nothing is getting done
- Internal policy gap in Ecology’s Water Quality and Shorelands programs
- Lack of coordination between WDFW and Ecology on stormwater
- Lower standards for NPDES Phase 2 jurisdictions, although they collectively have more impacts; some smaller jurisdictions do not have to meet standards, while the counties they are in do
- Federal fish agencies need to be more familiar with land use planning (GMA, links to impacts on salmon)
- Disconnect between liability laws and contaminated sediments standards
- 2514 and implementation through 2496 need to clearly delineate how the program works
- Industries take a reactive approach to compliance – do not know how all the various pieces of the stormwater “puzzle” fit together

- Potential inability to fund both ESA and CWA (NPDES in particular) requirements – widely distributed Washington citizen rate revolt and unknown balance point between impact and compliance risks
- Need more educational material for citizens – need for local governments to convince ratepayers that they should fund these programs
- Some programs/regulations are mutually exclusive and conflicting; also too much overlap and redundancy
- Lack of public acceptance of larger government to deal with stormwater issues

#### **14) Efficiencies to be Gained in Stormwater Programs/Regulations**

- ESA, NPDES and Stormwater Manual requirements should be coordinated and related to Tri-County Plan (multiple respondents)
- More funding for stormwater
- Stormwater as a higher priority
- More dedicated staff to stormwater
- Better science, better BMPs
- Coordination between 401 and 402 under NPDES
- Programmatic approach to project review, using ESA 4(d), HCPs
- NPDES Phase 2 and TMDLs should be linked
- Comprehensive Watershed Approach would address stormwater quality, quantity, and habitat
- Needs to be agreement between Tri-County and Stormwater Technical Manual Advisory Committee on land use issues
- Public attitudes need to be changed to accomplish anything
- Agencies should coordinate various regulations and distribute documents about how to comply
- Regulations should be based on threats to specific receiving waters. Focus on specific watersheds rather than blanket regulations.
- Standards should be specific and science-based, rather than policy-based
- Water quality standards should be based on BMPs, rather than on numeric discharge limits
- State primacy for 404 and Section 10 regulations – programmatic approach
- One-stop shopping for permits
- Funding for technical assistance should come from the state and federal agencies; would help everyone understand and comply with regulations (positive inter-relationship)
- Individual regulations (e.g., TMDLs, water quality standards, Stormwater Technical Manual, ESA) will drive NPDES compliance program
- Development/retrofits will have to comply with a variety of stormwater regulations
- A sense of the overall stormwater “puzzle” would be helpful to develop strategic response
- A one-stop-shopping approach (one combined stormwater agency)

- One set of regulations to ensure compliance with ESA, NPDES Phase 2, and RCW 90.48 State Clean Water Act - is meeting ESA and Phase 2 requirements good enough?
- Determining what the funding mechanism is for stormwater programs, and applying it to as many as possible
- Blessing of Eastern Washington manual by multiple agencies

## **15) Barriers to Realizing Efficiencies**

- Lack of funding (multiple respondents)
- Lack of technology
- Lack of public commitment
- Turf battles between various agencies – regulatory agencies not willing to delegate authority or “give up control”
- NMFS and USFWS lack of agreement
- Multiple jurisdictions managing watersheds
- Institutional barriers
- Environmental lobbyists
- Anything that prevents partnerships
- Too much process rather than product
- Stormwater science keeps evolving
- Politics



