

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Presentation of Commendations for Shoreline Planning
Commissioners Ted Bradshaw, Dan Kuhn, Roger Parker and Byron
Vadset
DEPARTMENT: City Council
PRESENTED BY: Mayor Scott Jepsen LB (for)

EXECUTIVE / COUNCIL SUMMARY

The purpose of this item is to commend Planning Commissioners who are retiring from the Shoreline Planning Commission. Ted Bradshaw, Dan Kuhn, Roger Parker and Byron Vadset are four of the original Planning Commissioners who were appointed by your Council on October 23, 1995. Your Council expressed the desire to commend these former Planning Commissioners for their service to the community, and they have agreed to be present at this meeting to accept their commendations.

The commendations are attached.

RECOMMENDATION

No action is required by Council. The Mayor will present these commendations.

ATTACHMENTS

- A: Commendation for Ted Bradshaw
- B: Commendation for Dan Kuhn
- C: Commendation for Roger Parker
- D: Commendation for Byron Vadset

Approved By: City Manager LB City Attorney N/A

COMMENDATION

- WHEREAS, upon incorporation, one of the first tasks of the Shoreline City Council was to appoint a nine member Planning Commission to provide guidance and direction for Shoreline's future growth and to develop its first Comprehensive Plan; and
- WHEREAS, from a field of over 60 applicants, Ted Bradshaw was selected as one of these individuals; and
- WHEREAS, Ted gracefully participated in the Planning Commission's deliberations, never failing to voice his opinion in the development of plans and policies; and
- WHEREAS, Ted spent many long hours listening to citizens' views on the Comprehensive Plan by spending many Saturdays with the Comprehensive Plan Advisory Committee as well as attending open houses and summits; and
- WHEREAS, Ted was a major contributor to the development of the Transportation and Land Use elements of the Comprehensive Plan; and
- WHEREAS, Ted can take pride in his contributions to the work of the Planning Commission in all its varied responsibilities;
- NOW, THEREFORE, on behalf of the citizens of Shoreline, the Shoreline City Council hereby commends

Ted Bradshaw

for his dedicated service on Shoreline's first Planning Commission, his contributions to the development of Shoreline's first Comprehensive Plan, and his contributions on the development of Shoreline's first Development Code.

Scott Jepsen, Mayor

Ronald Hansen, Deputy Mayor

Kevin Grossman

Rich Gustafson

Cheryl Lee

Linda Montgomery

Robert Ransom

COMMENDATION

- WHEREAS, upon incorporation, one of the first tasks of the Shoreline City Council was to appoint a nine member Planning Commission to provide guidance and direction for Shoreline's future growth and to develop its first Comprehensive Plan; and
- WHEREAS, from a field of over 60 applicants, Dan Kuhn was selected as one of these individuals; and
- WHEREAS, Dan consistently participated in the Planning Commission's deliberations, and guided those deliberations as Chair of the Commission, never failing to voice his opinions or contribute to the discussion about Shoreline's future; and
- WHEREAS, Dan spent many long hours listening to citizens' views on the Comprehensive Plan by attending many Saturdays with the Comprehensive Plan Advisory Committees, as well as attending open houses and summits; and
- WHEREAS, Dan can take pride in his contributions to the work of the Planning Commission in all its varied responsibilities; including serving as Chair;
- NOW, THEREFORE, on behalf of the citizens of Shoreline, the Shoreline City Council hereby commends

Lawrence "Dan" Kuhn

for his dedicated service on Shoreline's first Planning Commission, his contributions to the development of Shoreline's first Comprehensive Plan and his contributions in the development of Shoreline's first Development Code.

Scott Jepsen, Mayor

Ronald Hansen, Deputy Mayor

Kevin Grossman

Rich Gustafson

Cheryl Lee

Linda Montgomery

Robert Ransom

COMMENDATION

- WHEREAS, upon incorporation, one of the first tasks of the Shoreline City Council was to appoint a nine member Planning Commission to provide guidance and direction for Shoreline's future growth and to develop its first Comprehensive Plan; and
- WHEREAS, from a field of over 60 applicants, Roger A. Parker was selected as one of these individuals; and
- WHEREAS, Roger consistently participated in the Planning Commission's deliberations and guided those deliberations as chair of the Commission, never failing to voice his opinion or contribute to the discussion about Shoreline's future; and
- WHEREAS, Roger spent many long hours listening to citizens' views on the Comprehensive Plan by participating on several Saturdays with the Comprehensive Plan Advisory Committees, as well as attending open houses and summits; and
- WHEREAS, Roger can take pride in his contributions to the work of the Planning Commission in all its varied responsibilities, including serving as Chair;
- NOW, THEREFORE, on behalf of the citizens of Shoreline, the Shoreline City Council hereby commends

Roger A. Parker

for his dedicated service on Shoreline's first Planning Commission and his contributions to the development of Shoreline's first Comprehensive Plan.

Scott Jepsen, Mayor

Ronald Hansen, Deputy Mayor

Kevin Grossman

Rich Gustafson

Cheryl Lee

Linda Montgomery

Robert Ransom

COMMENDATION

- WHEREAS,** upon incorporation, one of the first tasks of the Shoreline City Council was to appoint a nine member Planning Commission to provide guidance and direction for Shoreline's future growth and to develop its first Comprehensive Plan; and
- WHEREAS,** from a field of over 60 applicants, Byron J. Vadset was selected as one of these individuals; and
- WHEREAS,** Byron, serving as Chair, participated in the Planning Commission's deliberations, never failing to voice his opinion or contribute to the discussion about Shoreline's future; and
- WHEREAS,** Byron spent many long hours listening to citizens' views on the Comprehensive Plan by attending many Saturdays with the Comprehensive Plan Advisory Committees, as well as attending open houses and summits; and
- WHEREAS,** Byron can take pride in his contributions to the work of the Planning Commission in all its varied responsibilities; including serving as Chair;
- NOW, THEREFORE,** on behalf of the citizens of Shoreline, the Shoreline City Council hereby commends

Byron J. Vadset

for his dedicated service on Shoreline's first Planning Commission, his contributions to the development of Shoreline's first Comprehensive Plan and his contributions in the development of Shoreline's first Development Code.

Scott Jepsen, Mayor

Ronald Hansen, Deputy Mayor

Kevin Grossman

Rich Gustafson

Cheryl Lee

Linda Montgomery

Robert Ransom

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	ESA Strategy
DEPARTMENT:	Public Works
PRESENTED BY:	William L. Conner, Public Works Director <i>wlc</i> Tim Stewart, Planning and Development Services Director <i>for T.S.</i> Ian Sievers, City Attorney <i>AK</i>

EXECUTIVE / COUNCIL SUMMARY

The purpose of this report is to provide background on the subject of the Endangered Species Act (ESA) and the listing of Chinook salmon as a threatened species. This is intended to be the first of three reports to Council with the final presentation being a risk assessment and a recommended ESA response program for Council consideration.

This report provides an overview of ESA regulations and a preliminary assessment of the City's impacted programs (Attachment A). Detailed information on ESA implications and the Federal and State requirements for surface water programs is provided in Attachment B. Attachment C provides a "first cut" evaluation of the programs currently in place in the City of Shoreline. The second report to Council will refine this information, offer an assessment of the City's risk exposure under ESA, and provide a range of options for response. The final presentation will offer a recommended ESA compliant program, including regulatory requirements and cost implications.

There are significant policy issues and implications for the City and private developers related to ESA. While the risks under ESA are real, they must be considered in the context of other regulations, existing regulatory risk and the limited Chinook salmon habitat potentially influenced by City of Shoreline actions. The City is relatively remote from Chinook habitat, thereby reducing, but not eliminating, the risk. The most probable avenue of risk is a citizen lawsuit motivated by multiple reasons such as opposition to a project. Additional avenues of risk exposure are: regulatory actions, CIP proprietary actions, and operation and maintenance of facilities proprietary actions.

It is important to note that the recourse for challenges to City regulatory actions is limited to remanding the regulations to the State for reconsideration. No other penalties are involved. This is due to the constitutional division of authority between the Federal Government and the States. In contrast, proprietary actions such as City construction projects or maintenance practices are similar to private party actions. For proprietary actions, violations are considered criminal actions with potentially severe financial and

even jail penalties. Hence, while the potential for City proprietary actions to harm Chinook habitat is remote, the penalties are severe.

Development of an informed policy to respond to ESA will manage the City's risks in a responsible manner, enhance the City's environment and minimize regulatory burdens to existing programs and economic growth. It is expected this will be an iterative process, with successive iterations based upon new federal policy and the anticipated listing of additional species. Relevant regulations include:

- Puget Sound Water Quality Management Plan (PSWQMP)
- Ecology Stormwater Management Manual for Puget Sound
- Growth Management Act (GMA)
- Clean Water Act (CWA) Phase II National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Management Permits
- ESA listing of fish
- Department of Natural Resources stormwater outfall leases, Resource Conservation and Recovery Act and Model Toxins Control Act

Many of the requirements for these regulations are similar and overlap (see comparisons in Attachment A). Although still in draft form, the Tri-County 4(d) rule (Document available in City Clerk's Office) offers a summary of the requirements to achieve compliance with the ESA. A key decision point for Council will be whether or not to adopt the 4(d) rule. As shown in Attachment A, the requirements of the 4(d) rule are similar to those of the PSWQMP with the addition of habitat enhancement and acquisition.

A preliminary comparison with other cities (i.e. Redmond, Auburn, Federal Way) indicates that Shoreline is comparable in terms of its own regulations and programs. Many, but not all of the program elements necessary for compliance with the ESA and CWA are already in place in Shoreline. For example, the City has adopted a drainage manual and a stormwater maintenance program. But Shoreline does not have an adopted Comprehensive Surface Water Management Program in place. As part of the second report to Council, a detailed analysis benchmarking the City of Shoreline with other local jurisdictions will be provided.

Additional surface water elements will be required to manage the City's risk under ESA. It must be emphasized that most of the actions are already required by the Puget Sound Water Quality Management Plan and will also be required by Clean Water Act NPDES Stormwater Permits. Additional information on risk will be presented in future reports.

RECOMMENDATION

There is no Council action required at this time. This report is provided for your information only.

Approved By: City Manager LB

City Attorney [Signature]

BACKGROUND / ANALYSIS

Surface Water or Stormwater?

These terms can be confused as both are used in this report. Surface water refers broadly to all the waters within Shoreline that are found on the surface of the earth. This includes ditches, streams, puddles, ponds, wetlands, lakes and Puget Sound. Surface water is an important resource and should be managed comprehensively to address its multiple resource values. Stormwater is generally used to describe surface water that flows only immediately after rainfall or snowmelt events. It generally refers to water in ditches and pipes but is sometimes used to include peak flows in streams following rainfall or snowmelt events. Many regulations specifically address stormwater.

Chinook salmon were listed by the National Marine Fisheries Service (NMFS) in March of 1999 as a threatened species. According to section 4(d) of the ESA, before the provisions of the ESA regarding threatened species can take effect, NMFS must publish a rule regarding the threatened species. NMFS published a draft rule in January 2000 which excluded (at their request) the Tri-County area (King, Snohomish and Pierce Counties). A separate 4(d) rule for the Tri-County area is anticipated in mid-June, however it could come as late as December. The rule will become effective 60 days after it is issued. At that point any person or organization that takes an action that harms Chinook salmon or their habitat is in violation of the ESA and is potentially subject to enforcement actions either by NMFS or through citizen suits.

The prohibition against harm in the ESA is potentially far reaching. Chinook use lower Thornton Creek (near Matthews Beach in Seattle), Lake Washington and Puget Sound for habitat. While it is believed Chinook habitat in Shoreline is limited or non-existent, surface water discharged from Shoreline has the potential to impact Chinook habitat by changing flows to streams or by introducing pollutants into the water bodies used by Chinook. Although Chinook spawn primarily in larger streams and rivers, a few have been observed in lower Thornton Creek. Thornton Creek has also been used for Chinook rearing.

The Tri-County draft 4(d) rule provides actions expected of local governments to minimize potential harm to Chinook habitat. The actions covered in the 4(d) rule are protected from further regulatory action by NMFS. For example, a City maintenance action, such as ditch cleaning, that is listed in the 4(d) rule and follows the measures outlined in the rule would not be subject to review or enforcement actions by NMFS. At the same time, the 4(d) rule is entirely optional for the City. If the requirements for coverage under the 4(d) rule are too severe, the City can choose not to apply for coverage and independently reexamine its programs and services to prevent harm to Chinook salmon, which would then be subject to direct review by NMFS.

There are two phases outlined in the draft 4(d) rule. The goal of the rule is to achieve recovery of the species. Phase One starts when the final 4(d) rule for the Puget Sound area goes into effect. During the five years of Phase One, cities and counties that

participate in the proposal must protect and improve habitat through planning efforts, programs, regulations and capital investment.

In the first two years of Phase One, cities and counties will complete an early action program that includes:

- Improved land use regulations
- A comprehensive stormwater program
- Specific road maintenance procedures
- Acquisition and restoration of habitat
- Scientific watershed assessments
- The first step toward development of watershed-based salmon conservation plans

In the last three years of Phase One, cities and counties must finish writing watershed plans.

Phase Two starts at the end of these five years and continues until the species is out of danger or as long as the participating jurisdictions have committed to implement the watershed plan and continue to comply with plan requirements.

To be covered by the Tri-County proposed 4(d) rule the City must officially commit to the rules Early Action Program and sign agreements or pass legislation that bind the City to the provisions of the 4(d) rule. When complete, the proposed 4(d) rule will include a timetable for completing the specified actions, a monitoring program, reporting procedures, and consequences for failing to meet timelines. The completed 4(d) rule will also include a funding program and a formula for determining how much money jurisdictions will need to carry out the early actions.

Many of these requirements have been required by other regulations and are in place in the City already (see Attachment A for detailed descriptions). A preliminary assessment indicates that Shoreline is comparable to other cities (i.e. Redmond, Auburn, Federal Way) in the Puget Sound region regarding adoption and implementation of ESA requirements. A detailed analysis benchmarking the City of Shoreline with other cities in the region will be provided to your Council in the next report.

The City is relatively remote from Chinook habitat, thereby reducing, but not eliminating, the risk. The most probable avenue of risk is a citizen lawsuit motivated by multiple reasons such as opposition to a project. Additional avenues of risk exposure are outlined in the following table:

City Action	Federal Authority and Risk Exposure
Regulatory Actions: Adoption and enforcement of City regulations	Upon court challenge, Federal court can remand local regulations to State for reconsideration. No penalties provided. Individual developers are at risk of having project approvals overturned. This could delay issuance of other permits causing economic impacts to private parties.

Proprietary Actions: City owned capital projects	All projects with Federal nexus (i.e. Federal funding or Federal permits) require consultation. Projects determined to harm fish will not be approved. If no Federal nexus, and the City determines project impacts are acceptable, opponents must prove that the project harmed habitat which may be difficult in a City such as Shoreline.
Proprietary Actions: Operations and maintenance of facilities	City action must be proven to have caused harm with this type of action. For example, the City would be at risk if a City maintenance crew dumped toxic material into a stream and dead salmon were discovered downstream. This would also violate other existing regulations.

It is important to note that the recourse for challenges to City regulatory actions is limited to remanding the regulations to the State for reconsideration. No other penalties are involved. This is due to the constitutional division of authority between the Federal Government and the States. In contrast, proprietary actions such as City construction projects or maintenance practices are similar to private party actions. For proprietary actions, violations are considered criminal actions with potentially severe financial and even jail penalties. Hence, while the potential for City proprietary actions to harm Chinook habitat is remote, the penalties are severe.

RECOMMENDATION

There is no Council action required at this time. This report is provided for your information only.

ATTACHMENTS

- Attachment A: Regulatory Comparison Table
- Attachment B: ESA Implications and Federal and State Requirements for Municipal Stormwater Programs
- Attachment C: First Cut Evaluation of the City's Surface Water Program Compliance with Puget Sound Water Quality Management Plan

ATTACHMENT A

Comparison of Regulatory Requirements

The table below lists the requirements of the draft Tri-County 4(d) rule. It compares the requirements with those of other already existing regulations. As shown, most of the elements of the draft 4(d) rule are already required by other regulations.

There are two phases outlined in the draft 4(d) rule. The goal of the rule is to achieve recovery of the species. Phase One starts when the final 4(d) rule for the Puget Sound area goes into effect. During the five years of Phase One, cities and counties that participate in the proposal must protect and improve habitat through planning efforts, programs, regulations and capital investment.

In the first two years of Phase One, cities and counties will complete an early action program that includes:

- Improved land use regulations
- A comprehensive stormwater program
- Specific road maintenance procedures
- Acquisition and restoration of habitat
- Scientific watershed assessments and
- The first step toward development of watershed-based salmon conservation plans.

In the last three years of Phase One, cities and counties must finish the watershed plans.

Phase Two starts at the end of these five years and continues until the species is out of danger or as long as the participating jurisdictions have committed to implement the watershed plan and continue to comply with plan requirements.

Comparison of Regulatory Requirements

Jurisdiction	Description of Requirement	Tri-County County of King County of Pierce County of Snohomish	Tri-County County of King County of Pierce County of Snohomish	City of Shoreline
1) Management Zones (buffers)	Waterfront Management Zones (WFMZ) - Shoreline (Municipal Ordinance 11.01.010) Shoreline (Municipal Ordinance 11.01.010)	Waterfront Management Zones (WFMZ) - Shoreline (Municipal Ordinance 11.01.010) Shoreline (Municipal Ordinance 11.01.010)	Waterfront Management Zones (WFMZ) - Shoreline (Municipal Ordinance 11.01.010) Shoreline (Municipal Ordinance 11.01.010)	Waterfront Management Zones (WFMZ) - Shoreline (Municipal Ordinance 11.01.010) Shoreline (Municipal Ordinance 11.01.010)
		Within 2 years of the anniversary date of the final 4(d) rule for the Puget Sound, cities and counties need to have enacted ordinances implementing management zones (i.e. buffers), including the definition of development (p.10).	Require adequate riparian buffers along all perennial and intermittent streams. Because of the intensity of disturbance in surrounding uplands, riparian buffers are at least as critical in urban areas as in rural areas ... Greater than or equal to 200 feet. (p. 184)	Current: Adopted the King County Environmentally Sensitive Areas Ordinance in place when the City incorporated in 1995. Future: In the process of adopting Phase II of Shoreline Development Code, which will revise buffer widths and change stream and wetland classifications to be consistent with DNR and DOE. Potentially to do: Inventory resources (i.e. identify and classify streams) Compare critical areas ordinance to Tri-County 4d requirements, i.e. buffers, management zones, and prohibitions.

Program/Service	Regulation of Discharges	National Program	State/Local Program	Other Discharges	Other Discharges
5) Source Control of Runoff Pollution	Point Source Water Quality Discharges (PWSWQMP)	National Program: In-stream Elimination System (NIPES) Phase 2 Municipal Separate Storm	State/Local Program: Addressed Source (AS) Pollution Abate	Discharges of toxic chemicals or other pollutants into waters or riparian areas supporting the listed salmonids is considered take (p. 172)	See item 4.
	Source control BMPs shall be applied to all projects to the max. extent possible (p. A-9)	Construction Site Source Controls: developing, implementing, and enforcing an erosion and sediment control program to address discharges of post-construction stormwater runoff for construction activities that disturb 1 or more acres of land are required. Post-construction site controls. Appropriate enforcement must be implemented.	Source control standards will be adopted by the jurisdictions that will reduce runoff pollution. (p. 20)		

Program Service	Description of Program	National Pollutant Discharge Elimination System (NPDES) Phase 2 Municipal Stormwater Criteria	Drainage District (DD) Section 10.0	Drainage District (DD) Section 10.0	City of Shoreline
6) Inspection and Enforcement	Inspection, compliance, and enforcement measures are required for urbanized areas (p. 29) Each county and city shall develop and enforce within local governments' authority, operation and maintenance programs and ordinances for new and existing public and private stormwater systems (p.20)	The NPDES permit that the operator of a small municipal separate storm sewer system is required to obtain is federally enforceable. The permittee could be subject to potential enforcement actions and penalties. City must enforce: • Illicit discharge prohibition • Construction site and post-construction site BMPs.	Local jurisdictions have the authority to regulate stormwater pursuant to their general police power authority (p. 19)	Under ESA section 9(a), it is illegal for any person to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect ... any wildlife species listed as endangered, unless with written authorization for incidental take (p. 170) Enforcement activities may be initiated for activities that harm protected salmonids; however, NMFS preference is for the entity to immediately modify activity and actively pursue an incidental take statement of permit through negotiations with NMFS (p. 172)	Current: Adopted King County Surface Water Manual (1992). Appendix A addresses maintenance requirements for privately owned drainage facilities. Drainage facility maintenance program includes annual inspection of privately owned facilities. Program also includes annual inspection of public retention systems, and scheduled vactoring of public conveyance systems. Potentially to do: Develop codes and procedures for enforcing standards of private retention systems.
7) Public Education	Public education programs are required	Public education programs required	Jurisdictions will implement programs to educate their citizens have on water quality, stormwater runoff and protection of endangered species (p.21)		Current: The City has funded public education programs in the past but the grant funding and the program has expired. Future: Public education will be required by regulations.

Program/Service	Description of Program/Service	Major Program/Service Component	Major Program/Service Component	Major Program/Service Component	Major Program/Service Component
8) Public Involvement	Public Involvement Public Involvement Public Involvement Public Involvement	Public Involvement Public Involvement Public Involvement Public Involvement	Public Involvement Public Involvement Public Involvement Public Involvement	Public Involvement Public Involvement Public Involvement Public Involvement	Public Involvement Public Involvement Public Involvement Public Involvement

Program/Source	Description of Requirement	National Pollutant Discharge Elimination System (NPDES) Phase 2 Municipal Stormwater Permit	Draft TCEC Permit Exempted Species Act (ESA) Section 40 Rule	Draft OICWA TCEC Act Rule	City of Seattle
9) Elimination of Illicit Discharges	Education programs are required to educate citizens about stormwater and its effects on water quality, flooding, and fish/wildlife habitat, and to discourage illicit dumping into storm drains. All pollutants other than sediment that occur on-site during construction shall be handled & disposed of (p. A-8)	Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system is required. Must develop a map of receiving waters and outfalls. Must prohibit discharges of pollutants to City system	Jurisdictions must have or participate in a program for preventing, detecting, and removing illicit discharges from industrial, commercial, and residential sites. (p. 21)	Discharges or dumping of toxic chemicals or other pollutants into waters or riparian areas supporting the listed salmonids is considered take (p. 172)	Current: The City investigates illicit discharges identified by customer reports and by routine City field operations. Potentially to do: Implement a program to systematically identify and remove illicit connections to the City's storm drain system.

Program Series	Description of Requirement	National Authority Delegation Section (NADPS) Phase 2 National Stormwater Policy	Local Authority Delegation Section (LADPS) Phase 2 (ESA) Section 4d Rule	Local Authority Delegation Section (LADPS) Phase 2 (ESA) Section 4d Rule	Current Funding
10) Intergovernmental Coordination	Taking cooperative actions in watersheds shared by other jurisdictions for urbanized areas is required (p. 25) Each local jurisdiction in the Puget Sound Basin is expected to coordinate with neighboring jurisdictions in stormwater growth management and basin planning (p. 22)	Public participation is required in developing the municipality's stormwater program.	Jurisdictions shall have a program or policy directive for ensuring that adequate inter-jurisdictional agreements exist for controlling storm water runoff conveyed between jurisdictions & for coordinating of watershed planning efforts & activities (p. 21)	NMFS anticipates consideration in the spring of 2000 of a comprehensive proposal for the conservation of salmonids, known as the tri-county 4d rule in Washington state.	Current: City participates in Regional Water Quality, King County Interagency Regional Analysis, Regional Funding Advisory Committees, Cedar/Lake WA and Central Puget Sound Watershed Forums, WRIA 8 Steering Committee, Thornton Creek Watershed Management Committee. Involved public in current code revision of stormwater program. Continue to do: Identify regional stormwater facilities. Use watershed approach on projects. Potentially to do: Implement a public education program to inform public about stormwater discharges.

Program/Service	Department of Regulation	National Pollutant Discharge Elimination System (NPDES) Phase 2 Municipal Stormwater Permit	Local Policy/Regulation (RSA Section 48:10b)	City of Shoreline
11) Monitoring	Measures to assess program effectiveness required	Measures to assess program effectiveness required, monitoring requirements to be defined by State. Local agency must evaluate: • program compliance • appropriateness of BMPs • progress toward goals	Must have or participate in a program for monitoring implementation and gathering maintaining and using adequate information to conduct planning, priority setting and program evaluation activities (p. 22).	Current: The City does not presently monitor water quality or habitat in a systematic way. Future to do: Investigate options for assessing effectiveness of program including shared funding of monitoring with other jurisdictions.
12) Consideration of Ecosystem Impacts in Zoning/Land Use Decisions	The goals of the local stormwater program shall be incorporated into the goals of the comprehensive plan and incorporate the ordinances required by the element into the development regulations (p. 22)		During the first 2 years of phase I, cities and counties will analyze their existing comprehensive planning policies and plans as required by the state Growth Management Act (p. 10) Jurisdictions will ensure that impacts are assessed when land use decisions are made (p. 21)	Current: There are policies in Shoreline Comprehensive Plan related to siting of new development in areas that are environmentally suitable. Potentially to do: Adjustment of zoning based on land suitability (drainage, soils) using watershed basin planning techniques.

Program/Service	Description of Requirement	National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permits	Draft City/County Enforcement Orders to (ESA) Section 40 Rule	Draft City/County Rule	City of Denver
13) Surface Water Maintenance Standards	Each county and city shall develop and enforce within the local governments' authority, operation and maintenance programs and ordinances for new and existing public and private stormwater systems (p.20)	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required. Must assure that private stormwater facilities are maintained.	Jurisdictions must have maintenance standards & programs for ensuring proper and timely maintenance of public and private stormwater facilities (p. 22)	Take prohibitions do not apply to routine road maintenance work performed consistent with the ODOT Guide by ODOT staff (p. 181). Other agencies should use ODOT guide as a guideline to develop their own maintenance standards.	Current: Adopted King County Surface Water Manual (1992). Appendix A addresses operations and maintenance. Drainage facility maintenance program includes annual inspection of privately owned facilities. Program also includes annual inspection and maintenance of public retention systems, and scheduled vactoring of public conveyance systems. King County Roads is maintaining stormwater facilities. Future: In the process of adopting KCSWM (1998) including an addendum to modify for City needs. Potentially to do: Provide staff training. Determine if KCSWM is consistent with DOE's manual.

Program/Service	Description of Requirement	National Pollutant Discharge Elimination System (NPDES) Phase 2 Municipal Stormwater Permit	Draft Or County Endangered Species Act (ESA) Section 40 Rule	Draft Or County ESA Rule	ESA Rule
14) Shorelines Management Program updates	Forest Board Water Quality Management Plan (PSYQMP)		During phase I, cities and counties will review their shoreline master program and make changes to conform with NMFS-approved State shoreline regulations (p. 11)		Current: Adopted King County Shorelines Management regulations and have adopted new policies related to shoreline management. To do: Revise and adopt a Shoreline Management Program that is consistent with the City's Comprehensive Plan and compliant with state requirements.
15) Integrated Pest Management regulations				Pesticide and herbicide applications that adversely affect the biological requirements of the species will be considered take (unless within an "exception") (p. 172). Portland Parks Integrated Pest Management Program provides adequate protection (p.183).	Current: City staff is using King County Integrated Best Management Plan and requiring contractors as well.

Program/Policy	Description of Requirement	Submittal Information: Exhaustion, Elimination System (NDEPS) Phase 2 Municipal Stormwater Program	Drafted/Revised Exhaustion System Act (ESSA) Section 4(d) Rule	Draft/Ordinance/ESSA 4(d) Rule	City of Snohomish
16) Road Maintenance BMPs	Each county and city shall develop and enforce within the local governments' authority, operation and maintenance programs and ordinances for new and existing public and private stormwater systems (p.20)	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required. The program must include municipal staff training on pollution prevention measures and techniques (e.g. regular street sweeping)	Road maintenance BMPs will be part of the early action program (p. 9) In the first 2-yr's beginning on the effective date of the final 4(d) rule for the Puget Sound, the Early Action Program will require development of road maintenance standards (p. 6)	Take prohibitions do not apply to routine road maintenance work performed consistent with the ODOT Guide of ODOT staff (p. 181). Other agencies should use ODOT guide as a guideline to develop their own maintenance Standards.	Same as 10.

Priority Status	Description of Requirement	Natural Resource Damage Elimination System (NREDS) Phase 2 Municipal Report	Draft 171-County Environmental System Act (ESA) Section 4d Rule	Draft DA 17-1-ESA-101 Rule	City of Shoreline
17) SEPA conditions	Development of local government stormwater management programs should include compliance with chapter 43.21C RCW, the state environmental policy act; and chapter 34.05 RCW, the administrative procedures act (p. 33)	Jurisdictions shall use best available science and adaptive management to continue to evaluate development regulations and permit programs that may jeopardize the continued existence of listed salmon, adversely modify their critical habitat or both. Improvement could potentially be made to the State Enviro. Policy Act procedures (p. 17)	Issuance of environmental permits shall be eligible for limitations on the prohibition of take (p. 8)		Current: Adopted phase 1 of the Shoreline Development Code, which includes new environmental procedures that are based on the DOE SEPA Model Ordinance and are consistent with the City's Comprehensive Plan. Future: In the process of adopting Shoreline Development Code, which will revise environmental procedures.

Program/Service	Description of Requirement	National Pollution Discharge Elimination System (NPDES) Phase 2 Permitting/State Water Pollution	Draft Tri-County Environmental Services Act (ESA) Section 4d Rule	Draft Or. W.A. ESA 4d Rule	City of Shoreline
18) Critical Areas Protection	Puget Sound Water Quality Management Plan (PSWQMP) Requirements in wetland areas and water quality sensitive areas (p. A-10 --11)	Developing, implementing and enforcing a program to address discharges of post construction sw runoff. Applicable controls could include preventive actions such as protecting sensitive areas (e.g. wetlands).	Within 2 years of the anniversary date of the final 4(d) rule for the Puget Sound, cities and counties need to have enacted ordinances implementing management zones (i.e. buffers adjacent to streams, lakes, wetlands, and marine shorelines) (p.12)	Avoid unstable slopes, wetlands, areas of high habitat value. Require adequate riparian buffers along all perennial and intermittent streams >or=200 feet. Avoid stream crossings. Protect historic meander patterns and flood plains. Protect wetlands (pp. 184-5).	Current: Adopted the King County Environmentally Sensitive Areas Ordinance in place when the City incorporated in 1995. Future: In the process of adopting Phase II of Shoreline Development Code, which will revise buffer widths and change stream and wetland classifications to be consistent with DNR and DOE. Potentially to do: Compare critical areas ordinance to Tri-County 4d requirements, i.e. buffers, management zones, and prohibitions. Inventory resources (i.e. id and classify streams)

Program/Service	Description of Requirement				Draft OR WA ESA 200 Regs	City of Shoreline
	Project-Sound Water Quality Management Plan (PSWQMP)	National Pollutant Discharge Elimination System (NPDES) Phase 2 Municipal Stormwater Permits	Draft Tri-County Endangered Species Act (ESA) Section 40 Rule			
19) Implement projects to restore habitat and water quality			In the first 2-yrs beginning on the effective date of the final 4(d) rule for the Puget Sound, the Early Action Program will include commitments to habitat acquisition and restoration (p. 6)	State, local, and private habitat restoration activities are exempt from take prohibitions (p. 171)	Current: The Capital Improvement Plan includes an annual \$25k budget for identifying stream restoration and habitat enhancement projects. Potential to do: Identify projects and incorporate into CIP.	
			Jurisdictions shall have or participate in a program for constructing habitat enhancements and ensuring their long-term viability & protection through formal stewardship (p. 22). Commit to implementing WRIA plan recommendations (p. 46).			

Program/Source	Description of Requirement	Additional Information Discharge Elimination System (DES) Phase 2 Mandatory Stormwater Permits	Draft Tri-County Industrial Basins Act (ISA) Section 4(d)	Draft OR WQESA and Rule	City of Shoreline
20) Adaptive Management	Puget Sound Water Quality Management Plan (PSWQMP)		Must have a formalized process to monitor progress and modify actions as appropriate including policies, procedures, programs and projects (p. 37-43).	Identify a commitment to and the responsibility to regularly monitor and maintain and detention basins and other management tools over the long term, and to adapt practices as needed based on monitoring results (p. 185).	Although all city programs are periodically reviewed, the 4(d) rule would require a more formal monitoring and review process.

The information in the table was obtained from the following sources:

- ¹ Washington State Department of Ecology, Stormwater Program Guidance Manual for the Puget Sound Basin, (July 1992)
- ² various sources from the Environmental Protection Agency web site
- ³ Draft Proposed Tri County 4(d) Rule Framework, January 21, 2000
- ⁴ Federal Register, Department of Commerce, 50CFR Part 223, January 3, 2000

ATTACHMENT B

ESA Implications and Federal and State Requirements for Municipal Stormwater Programs

Section I of this document summarizes the implications (on City of Shoreline activities) of the listing of Puget Sound Chinook (and other local fish species) as threatened under the Endangered Species Act. Section II outlines other federal and state laws and regulations that will impact the duties that fall under surface water management for the City of Shoreline. Consideration of these duties is important, as they will affect the future configuration of the City's surface water management program, and how it interfaces with Public Works, Planning and Development Services, Parks and other relevant departments.

SECTION I IMPLICATIONS OF ESA LISTINGS ON CITY OF SHORELINE ACTIVITIES

Chinook Listing

In March 1999, National Marine Fisheries Service (NMFS) listed Puget Sound Chinook salmon as threatened under the Endangered Species Act (ESA). The listing prohibits "take", which translates as harm to threatened or endangered species and includes hurting its habitat. NMFS is the lead agency on developing a recovery plan which must include three key components: substance (*significant, science based commitments*), assurance (*commitments are real, agreed to by politicians and adequately funded*), and adaptability (*progress can be monitored and tracked, and the plan is flexible enough to maintain progress*).

NMFS 4(d) Rule

On January 3, 2000, the NMFS published their draft ESA 4(d) ruling to protect threatened and endangered Chinook salmon from Northern California to the Canadian border. NMFS plans to publish the final rule by June 19, 2000. This rule would set protective measures that NMFS considers to be necessary to provide for conservation of the species. NMFS has broad discretion and flexibility in fashioning this rule and identifying necessary protective measures.

When the 4(d) rule is finalized, ESA "take" prohibitions will apply to many municipal activities including development permitting, road and parks maintenance, storm water management, and capital improvement projects. The proposed 4(d) rule may also list certain activities that can continue without violating the rule.

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Violating the requirements spelled out in the 4(d) rule could result in federal fines and other penalties, as well as third party lawsuits. Compliance with the 4(d) rule would not necessarily preclude third party lawsuits. However, NMFS staff has stated at public meetings, that activities compliant with the standard set by the 4(d) rule would have little risk of liability. Furthermore, activities compliant with the 4(d) rule would not be at risk of enforcement action by NMFS.

Potential Impacts of the Final 4(d) Rule on City Operations

- ◆ Public Works projects:
 - ◇ Rank projects using criteria that reflect the importance of fish friendly projects.
 - ◇ Longer, more costly, environmental review with respect to wetlands, erosion control, sediment control, water flow control, and water quality issues.
 - ◇ Projects that are federally funded or involve federal permitting will require biological assessments, and mitigation measures to address any potential take of listed species. These would include the Aurora Corridor project and Community Block Grant development funds utilized for the City's curb ramp program. With current and planned staffing levels NMFS is struggling to keep pace with the workload to review project proposals. Typical turnaround times for project review is as long as 135 days. The final 4(d) rule is expected to increase this workload, as NMFS will also be reviewing urban development plans and habitat conservation plans.
 - ◇ More mitigation requirements will increase project complexity and cost.
 - ◇ Some small projects may not be economically feasible.
 - ◇ Construction inspectors will need to be trained on best management practices for construction site stormwater runoff control.
 - ◇ Large projects, i.e. the Aurora Corridor project will include regional stormwater control and water quality facilities.
- ◆ Increased need to develop a citywide storm system map that shows major pipes, outfalls, and topography.
- ◆ Roads operations will need to adopt best management practices.
 - ◇ To include: schedules of activities, prohibitions of practices, maintenance procedures, and the use of pollution and control devices to prevent or reduce the amount of pollution introduced to receiving bodies of stormwater runoff.
 - ◇ Roads staff will need to be trained.
- ◆ Pesticide, herbicide, fertilizer use restrictions. Training for staff.
- ◆ Municipal regulation of construction site stormwater runoff control (at new developments and re-developments):
 - ◇ Building inspectors will need to be trained on best management practices.
 - ◇ Code enforcement will need to be defined and implemented.

Bull Trout Listing

On October 28, 1999 the United States Fish and Wildlife Service (USFW) listed Bull trout within the coastal Puget Sound area as "threatened" under the ESA. Research on

Bull trout habitat preferences is limited. But, it is known that Bull trout primarily inhabit higher elevation watersheds in rural areas. The USFW has not yet specified which specific areas the listing would impact, nor have they set a date for publishing a 4(d) ruling. However, the USFW "take" prohibitions are in effect as of the listing date.

Coho Listing

As of April of 2000, the expected USFW ruling on the listing of Puget Sound Coho has been delayed. Listing Coho as threatened under ESA could have stronger impacts to activities in urban areas than the listing of Chinook. Coho are known to populate many more urban streams than Chinook. In Shoreline Coho have been found in Boeing Creek, Thornton Creek, McAleer Creek, and Lyon Creek.

SECTION II OVERVIEW OF FEDERAL AND STATE REQUIREMENTS FOR MUNICIPAL STORMWATER PROGRAMS

Background of Relevant Federal and State Laws and Regulations

The federal Clean Water Act (CWA), and state statutes RCW 90.48 (Water Pollution Control Act) and RCW 90.70 (re-codified under RCW 90.71 Puget Sound Water Quality Protection) establish federal and state authority for stormwater management in the Puget Sound basin. The CWA was enacted by Congress to prohibit unauthorized discharge of pollutants to waters of the United States. The Washington State Department of Ecology (Ecology) is designated, under RCW 90.48, as the State Water Pollution Control Agency for all purposes of the federal Clean Water Act. RCW 90.70 requires the Puget Sound Water Quality Authority (Authority) to prepare and adopt a comprehensive Puget Sound water quality plan.

In March 1988 the United States Environmental Protection Agency (EPA) formally designated Puget Sound as an estuary of national significance under Section 320 of the Clean Water Act, as amended by P.L. 100-4 (the Water Quality Act of 1987). This made Puget Sound part of a nationwide program to develop management plans for the protection of the nation's estuaries. The Authority, together with EPA Region 10, and Ecology, co-manage the Puget Sound Estuary Program. Section 320 requires the development of a comprehensive conservation and management plan (CCMP) for each designated estuary. The CCMP for Puget Sound is the Puget Sound Water Quality Management Plan (PSWQMP).

RCW 90.71 transfers all powers, duties (including implementation of the PSWQMP), and function of the Authority to the Puget Sound Water Quality Action Team. The Action Team has 17 members: a governor-appointed chair; the heads of 10 state agencies involved in carrying out the PSWQMP; a representative of federally recognized tribes; representatives of federal agencies; and representatives of cities, and counties, appointed by the governor.

The 1987 PSWQMP called for: (1) stormwater programs to be developed in urbanized areas of Puget Sound in a phased program, starting with the largest cities; and (2) all cities and counties to develop operation and maintenance programs, adopt ordinances for new development, and develop stormwater education programs. It also called for Ecology to develop technical manuals, guidelines, regulations and model ordinances. The 1994 plan revision includes the addition of performance criteria for BMPs (best management practices) to help track performance, emphasize coordination among watersheds, address vector waste, and better integrate stormwater controls with Growth Management Act requirements.

The PSWQMP includes a stormwater program goal that is relevant to the City of Shoreline's developing surface water management program. The goal includes protecting shellfish beds, fish habitat and other resources; preventing the contamination of sediments from urban runoff; and achieving standards for water and sediment quality by reducing and eventually eliminating harm from pollutant discharges from storm water.

The implementation strategy for achieving this goal includes: (1) requiring that all cities and counties meet minimum requirements for a comprehensive stormwater program; (2) developing stormwater programs in urbanized areas of Puget Sound in a phased program starting with the largest cities; and (3) developing NPDES (described below) permits for municipal storm water that incorporate the plan's stormwater requirements and federal requirements, and phasing in additional NPDES permits for municipal storm water for smaller jurisdictions.

PSWQMP Storm Water Program Guidelines for Municipalities

According to the PSWQMP, a "basic" surface water management plan should have five elements. The five basic plan elements are:

1. Ordinances containing minimum requirements for new development and redevelopment.
2. Technical manual containing source control and treatment best management practices (BMPs). BMPs are defined below.
3. Operation and Maintenance programs and ordinances.
4. Education programs.
5. Growth management planning and interlocal coordination.

In addition to these five basic plan elements, the PSWQMP calls for storm water program plans to include additional "comprehensive" plan elements. The State's target for local

governments to implement the "comprehensive" program is June 30, 2000. Ecology staff has indicated they are encouraging municipalities to implement the plan recommendations. However, there would be no enforcement action taken against municipalities that demonstrate an earnest effort to comply, yet miss the deadline.

A preliminary comparison with other cities (i.e. Redmond, Federal Way, and Auburn) indicates that Shoreline is comparable in terms of its own regulations and programs. Many, but not all of the program elements necessary for compliance with PSWCMP are already in place in Shoreline. For example, the City has adopted a drainage manual, and a stormwater maintenance program. But Shoreline does not have an adopted Comprehensive Surface Water Management Program plan in place or program elements for a water quality education program or monitoring.

The "comprehensive" plan elements include all of the basic plan elements plus 7 additional elements.

1. Implementation schedule (*to include a scope of work identifying program elements that are missing or need improvement and a schedule for addressing those shortfalls*).
2. Identification and ranking of significant water pollution sources (*this is an ongoing program to assess and identify potential and actual water quality problems associated with storm water runoff*).
3. Investigation and correction of problem storm drains (*to prevent or eliminate illicit connections and reduce the incidence of improper disposal and spills into the storm water drainage system*).
4. Inspection, compliance, and enforcement measures.
5. Water quality response program.
6. Adequate funding for the program.
7. Local coordination agreements (*to identify shared waterbodies and drainage basins and those issues that must be addressed in cooperation with other jurisdictions to achieve effective storm water programs*).

Additionally, the recommendations for the Public Education program element are more specific and more strongly stated in the Comprehensive Program.

Best Management Practices (BMPs) Defined:

BMPs for storm water management are schedules of activities, prohibitions of practices, maintenance procedures, the use of pollution control devices and other management practices used to prevent or reduce the amount of pollution introduced to receiving bodies of storm water runoff.

Non-structural BMPs include: ordinances and zoning requirements (such as erosion and sediment control ordinances); maintenance activities (such as storm drain cleaning and street sweeping); and education/outreach activities.

Structural BMPs include structures like detention ponds; grassed swales; sand filters and filter strips; infiltration basins; and porous pavement, etc.

Generally non-structural BMPs are more cost-effective than structural BMPs. If structural BMPs are needed, they can be implemented in a more cost-effective manner if they are included in initial plans.

NPDES Permit Requirements for Small Municipalities

In 1972, Congress amended the Federal Water Pollution Control Act (referred to as the Clean Water Act) to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program is a permit program designated to regulate point source discharges.

Initial efforts to improve water quality under the NPDES program primarily focused on reducing pollutants in industrial process wastewater and municipal sewage. As pollution control measures for industrial sewage were further developed, refined, and implemented, it became increasingly evident that more diffuse sources of water pollution were significant causes of water quality impairments. Specifically, storm water runoff draining large surface areas, such as agricultural and urban land, were found to be a major cause of adverse water quality impairments. In 1987, Congress amended the CWA to require implementation of a comprehensive approach for addressing storm water discharges under the NPDES program. As a first step to implementing this approach the NPDES Phase-I storm water program was issued in 1990. The purpose of this program is to reduce polluted runoff from priority sources, including major industrial facilities, large and medium city storm sewers, and construction sites that disturb 5 or more acres. Larger local jurisdictions such as King County, the City of Seattle, and the City of Bellevue are now permitted under Phase-I.

In October of 1999, the United States Environmental Protection Agency (EPA) set into law the NPDES Phase-II storm water program. Phase-II sets storm water management requirements for municipalities under 100,000 population. The City of Shoreline is included in the EPA listing of incorporated places and counties that were designated under the Storm Water Phase-II rules.

Ecology will administer the NPDES Phase-II permit for the State of Washington. Ecology is also charged, under the PSWQMP, with reviewing progress made by local governments in developing and implementing storm water programs. Ecology staff expects that municipal storm water programs that comply with the PSWQMP Comprehensive Program requirements would also comply with most (if not all) of the NPDES Phase-II requirements.

At a minimum, jurisdictions regulated under Phase-II must:

- ◆ Specify BMPs for six minimum control measures and implement them to the "maximum extent practicable." The control measures are:
 1. Public education and outreach on storm water impacts;
 2. Public involvement/participation (*in developing the municipality's storm water program*);
 3. Illicit discharge detection and elimination (*BMPs would include developing storm sewer maps, prohibiting illicit discharges into the separate storm sewer system, and enforcement procedures*);
 4. Construction site storm water runoff control;
 5. Post-construction storm water management in new development and redevelopment;
 6. Pollution prevention/good housekeeping for municipal operations;
- ◆ Identify measurable goals for control measures (*e.g. inspecting or repairing a certain number of drain inlets each year, surveying all municipal right-of-ways to identify illicit discharges, reducing sediment loading*);
- ◆ Show an implementation schedule of activities or frequency of activities (*e.g., vacuum storm drain outlets x times per year, conduct classroom storm water education x times per year*);
- ◆ Define the entity responsible for implementation. (*There may be one individual in one department who is responsible for the entire program, or the responsibility may be shared among several departments.*); and
- ◆ Conduct periodic evaluations and assessments of the storm water management practices, maintain records, and prepare required reports.

According to Ed O'Brien, Ecology NPDES Project Manager, the State's strategy to respond to the ESA listing of Chinook includes updating local storm water programs by September of 2002. These updates could be reflected in additional requirements for municipal comprehensive storm water programs and NPDES permits.

Proposed PHASE II Permitting Process

There are two types of NPDES permits – general and individual. An individual permit is a permit specifically tailored for an individual facility (i.e. a municipal storm water system, or a construction site where more than one acre will be disturbed) based on the information contained in the application. The permitting authority (Ecology is the designated authority for the State of Washington) develops a permit for that facility based on the information contained in the permit application, such as type of activity, nature of discharge, receiving water quality, etc. The permit is then issued to the facility for a specific time period (not to exceed five years).

A general permit is developed and issued by a permitting authority to cover multiple facilities within a specific category. Ecology and EPA are planning to develop a general permit for municipalities. General permits may offer a cost-effective option for agencies

because of the large number of facilities that can be covered under a single permit. Permittees usually submit a Notice of Intent (NOI) to the permitting authority (Ecology) to be covered under a general permit.

Generally both types of NPDES permits (individual and general) are obtained by application to the EPA or to the appropriate state agency. Facilities covered under the Phase-II rule would be required to identify and submit to the NPDES permitting authority (Ecology) the following information:

- ◆ The BMPs that will be implemented;
- ◆ The measurable goals for the minimum control measures;
- ◆ The month and year in which each BMP will be started and completed, or the frequency of action if it is ongoing; and
- ◆ The person(s) responsible for implementing or coordinating the storm water management program.

The information could be submitted in a NOI, if the community wishes to apply under a general permit or on an individual application if the community seeks an individual permit. The permit application legally binds the stormwater program commitments that need to be implemented within five years.

Timeline for the Phase-II Permit

10-1999	Final Phase-II regulations signed into law
10-2000	EPA completes a menu of BMPs to assist municipalities in meeting minimum measures
10-2000	EPA prepares a model general permit
10-2001	EPA prepares guidance document on measurable goals
12-2002	State issues general permits for small municipalities and construction
03-2003	Permit application deadline for small municipalities and construction
02-2008	Small municipal programs developed and implemented

ATTACHMENT C

**FIRST CUT EVALUATION OF
THE CITY'S SURFACE WATER PROGRAM
COMPLIANCE WITH
PUGET SOUND WATER QUALITY MANAGEMENT PLAN**

Surface Water staff made a first cut evaluation of current City programs with respect to Puget Sound Water Quality Management Plan (PSWQMP) stormwater program requirements as outlined in, Guidance for Comprehensive Stormwater Programs Under the Puget Sound Water Quality Management Plan (see Attachment 1). This evaluation focuses on the "basic" program element requirements. It also includes a summary of which "comprehensive" program elements need to be addressed by the City's existing stormwater program. The State's target for local governments to implement the "comprehensive" program is June 30, 2000.

Summary of Evaluation of "Basic" Program Elements

The City has met all of the five "basic" program elements at least partially. City staff will be reviewing the existing program with the Department of Ecology staff to determine specifically what additional program development is needed to be in compliance with state requirements. However, based upon an initial review by City staff, additional development of program elements to achieve full compliance will be required in the following areas:

Element 1 Ordinances Containing Minimum Requirements for New Development and Redevelopment:

- ◆ The City needs to evaluate whether the adopted (1995) King County stormwater management ordinances relative to operations and maintenance of stormwater facilities are consistent with Ecology's Stormwater Program Guidance Manual (July 1992).
- ◆ The ordinance must include enforcement and right-of-entry provisions for operations and maintenance activities.

Element 2 Adoption of Stormwater Manual Containing Best Management Practices:

- ◆ Technical Manual update – The City is adopting the 1998 King County Surface Water Management Design Manual, with an addendum to modify the manual to meet City needs. The adoption will also include Department of Ecology's Urban Land Use BMPs Volume IV and future amendments by reference as the Source Control BMP Manual for the City of Shoreline.

- ◆ Code Enforcement – Evaluate need to develop codes and procedures for enforcing stormwater retention system standards.

Element 3 Operation and Maintenance Programs and Ordinances:

- ◆ Staff Training – Need to provide training to prevent and reduce stormwater pollution from local government operations.

Element 4 Public Education Programs:

- ◆ Educational Program – Need to implement a long-term stormwater public education program aimed at residents and businesses to inform them about the impacts of stormwater discharges on water quality.

Element 5 Growth Management Planning and Interlocal Government Coordination:

- ◆ Capital Facilities – Need to identify regional stormwater treatment facilities, including retention/detention basins, as well as stormwater conveyance systems.
- ◆ Watershed Approach – Need to continue cooperating with jurisdictions sharing common watersheds and basins, in analyzing the effects and control of stormwater runoff and adopting coordinated and compatible programs for stormwater management.

The assessment of current City of Shoreline programs consistent with the five “basic” elements and identification of program gaps are discussed in greater detail following the evaluation of “Comprehensive” program elements.

Evaluation of “Comprehensive” Program Elements

It is clear that the City must substantially enhance the surface water program to meet “comprehensive” program requirements. Five of the seven additional program elements not addressed by the City’s existing program include:

- ◆ Implementation schedule;
- ◆ Identification and ranking of significant water pollution sources;
- ◆ Investigation and correction of problem storm drains;
- ◆ Water quality response program;
- ◆ Local coordination agreements.

The remaining two “comprehensive” program elements are partially addressed by the existing City program. (1) The existing program elements are funded, but budget would need to be identified and allocated for program enhancements. (2) City staff inspect stormwater retention facilities, however, continued development of enforcement measures to eliminate illicit discharges and to control pollutants in stormwater discharges is still necessary.

Existing City Surface Water Program

The City's surface water program has been building since the City incorporated in 1995. To date, the following has been accomplished:

Adopted Ordinances and Resolutions

- ◆ Passed City Ordinance No. 11, in June 1995, adopting by reference Title 21A of King County Code as interim zoning regulations of the City.
- ◆ Passed City Ordinance No. 14, in June 1995, adopting by reference Title 9, Surface Water Management, of King County Code as an interim regulation of the City.
- ◆ Passed City Ordinance No. 22, in June 1995, adopting by reference Title 23 Enforcement of the King County Code as an interim regulation of the City.
- ◆ Passed City Ordinance No. 125, in April 1997, adopting a revised interim zoning code, Chapter 18.05 of the Shoreline Municipal Code, and repealing City Ordinance No. 11.
- ◆ Passed City Ordinance No. 154, in February 1998, amending Ordinance No. 14 for drainage review.
- ◆ Adopted Shoreline Municipal Code, Chapter 18.24 Environmental Sensitive Areas.
- ◆ Adopted resolution No. 19, in July 1995, to contract with King County for surface water management services, including billing and collection of surface water fees.

NOTE: Copies of ordinances referenced in this document are attached (Attachment 2).

Land Use Planning

- ◆ Adopted the Comprehensive Plan in November 1998.
- ◆ Funded and filled a Code Enforcement Officer position, in March 1999.
- ◆ The City adopted the 1992 King County Surface Water Design Manual.
- ◆ The City is revising the Development Code to implement the adopted Comprehensive Plan. Phase I of the revision, which included procedural changes to the Code, were adopted in February 2000. Phase II changes, which include revised development standards, are expected to be adopted by summer 2000. Revisions will include new standards for critical areas and the adoption of the 1998 King County Surface Water Management Design Manual, with an addendum to modify the manual for City needs. The adoption would also include Department of Ecology's Urban Land Use BMPs Volume IV and future amendments by reference as the Source Control BMP Manual for the City of Shoreline.

Regional Watershed Planning

- ◆ City staff and officials are involved with the Regional Water Quality Committee (RWQC).
- ◆ The City of Shoreline is working with citizens, stakeholder groups, and the City of Seattle to develop a Thornton Creek Watershed Management Plan. The planning

effort is being spearheaded by the City of Seattle and is scheduled for completion by the end of 2000.

- ◆ The City is involved with the King County Interagency Regulatory Analysis Committee and the Regional Funding Advisory Committee.
- ◆ City staff and officials have been actively involved in regional watershed forums: Cedar River/Lake Washington, Central Puget Sound, and WRIA 8 Steering Committee.

Conservation and Remediation

- ◆ Adopted the King County Environmentally Sensitive Areas Ordinance in 1995.
- ◆ Created a Citywide surface water utility, which includes a commercial and residential fee structure to ensure proper maintenance and operation of surface water facilities.
- ◆ 2000-2005 Capital Improvement Plan includes a budget of \$25,000 per year for a Stream Rehabilitation and Habitat Enhancement Program to evaluate, design and construct improvements to provide enhancement to streams, wetlands, and other sensitive areas.
- ◆ Public Works developed a spill response procedure to protect water quality.
- ◆ Contributed \$5,000 in funding to Lake Washington Studies.
- ◆ In 1998, the City worked with King County to reroute the outlet of Boeing Creek into Puget Sound to remove a fish barrier. Prior to this project, salmon could only enter the stream through two perched culverts during a very high tide. The stream now flows through an existing box culvert at grade, and the perched culverts serve as high flow bypass.
- ◆ The City's first Capital Improvement Program (CIP) dedicated approximately \$4 million dollars within the Thornton Creek basin over the next six years to reduce flooding, improve detention, enhance habitat, and improve in-stream flows.
- ◆ Earthworks-Summer Teen Employment Program - Employed low-income teens to help remove invasive plants and restore natural habitat, also provides educational field trips.

Maintenance

- ◆ Funded and filled a Surface Water Coordinator position, in March 1998, to coordinate surface water management. Responsibilities include:
 - ◇ Develop strategic plan for a surface water program.
 - ◇ Manage residential and regional stormwater detention facilities.
 - ◇ Inspect commercial stormwater detention facilities.
 - ◇ Organize responses to customer requests regarding surface water concerns.
 - ◇ Identify, prioritize, and track status of small drainage projects.
 - ◇ Coordinate King County contract for Surface Water Utility fee billing service.
 - ◇ Represent the City as a technical support staff for the Lake Washington Watershed Forum and the WRIA 8 Steering Committee.
- ◆ Transferred responsibility from King County Water and Land Resources Division for management of surface water service duties on April 1, 1998.

- ◆ The City adopted a three-year Public Works implementation plan to determine the best method of service delivery for street/drainage system maintenance. The implementation of this plan will include investigation and implementation of current best management practices for maintenance.
- ◆ City staff conducts annual inspections of residential, commercial, and regional retention facilities to ensure they are working properly. City facilities are fixed immediately when necessary, and commercial facility owners are notified of necessary maintenance. Commercial facilities are re-inspected when a notice of work completion is received.
- ◆ The City has a regular street sweeping and vector program through a maintenance interlocal agreement with King County Roads. King County follows State guidelines for disposal of street wastes.
- ◆ Investigated 1,624 customer requests (January 1996 – March 2000) for service on drainage concerns relating to flooding and water quality. In 1999 reduced surface water related customer requests by 55% over previous years.

Surface Water Projects

- ◆ Developed a process for equitably ranking stormwater projects, that includes criteria such as: impacts to the natural system, improvements to local watershed needs, and impact on water quality/fish habitat.
- ◆ On an annual basis, staff analyzes data on drainage complaints to identify and prioritize drainage construction projects.
- ◆ Completed a construction project at Shoreview Park to repair and enhance the regional detention facility.
- ◆ Constructed 50 small drainage improvement projects with total costs of \$1,208,983 (1997 – winter 2000).
- ◆ Developed a six year Capital Improvement Program with a \$9.6 million budget for surface water improvement projects. This includes approximately \$4 million dollars within the Thornton Creek basin to reduce flooding, improve detention, enhance habitat, and improve in-stream flows. Another \$1,900,000 was budgeted for Citywide small drainage projects. Milestones include:
 - ◇ Started basin analysis on Ronald Bog drainage improvements.
 - ◇ Started basin analysis on 3rd Ave. NW drainage improvements.
 - ◇ Prioritized 11 additional small drainage improvement projects for design and construction in 2000. Total project cost is estimated at \$529,000.

Education

- ◆ Boeing Creek Education Initiative - In 1999 the City, with funding from the Puget Sound Water Quality Action Team, developed and implemented a program to educate citizens about Boeing Creek and its impacts on Puget Sound. The program accomplishments include:
 - ◇ Community Events, i.e. Boeing Creek cleanups, plant salvage, Boeing Creek history presentations, ESA presentation (32 events with 433 total participants);
 - ◇ Watershed Keepers Classes (2 classes with 52 total participants);

- ◇ Classroom Presentation (8 presentations with 369 total participants);
- ◇ Neighborhood Meetings (2 meetings with 26 total participants);
- ◇ Creation of a water quality education curriculum for Shoreline Elementary Schools;
- ◇ Shoreview Park Master Trail Plan – Includes an Interpretive Trail plan mapping existing trails, natural and unnatural features and recommendations for a dedicated trail system.
- ◆ Beach Naturalist Program
 - ◇ 1997-99 – Interpretive Naturalist-led walks at Richmond Beach (6 per year) with funding and administration provided by Shoreline Parks.
 - ◇ 2000 - Expanding program to 11 events per year, and including a pre-program training at the Seattle Aquarium and local beaches for volunteer naturalists. The program will also include beach signage and educational materials. Funding and administration provided by the Central Puget Sound Watershed Forum and Shoreline Parks.
- ◆ City staff inspect private drainage retention facilities annually to spot drainage concerns and alert property owners of conditions needing maintenance, to reduce flooding and improve water quality.

Evaluation of Basic Program -Details

Program Element 1 – **ORDINANCES CONTAINING MINIMUM REQUIREMENTS FOR NEW DEVELOPMENT AND REDEVELOPMENT**

Outcome

Cities, towns and counties in the Puget Sound Basin will minimize the contribution of stormwater pollution and the impairment of beneficial uses from new development and re-development through adoption and implementation of ordinances requiring stormwater controls.

Where We Are Today

Council directives that are consistent with this program element requirement:

- ◆ 1999 Council work plan priority to develop a code enforcement program reflective of City values.
- ◆ 1999 Council work plan priority to develop and adopt new codes that implement the policies of the Comprehensive Plan.

Existing City ordinances and codes that would address this program element are:

- ◆ Ordinance No.14 adopting by reference Title 9, Surface Water Management, of King County Code as an interim regulation of the City. *Note: City Ordinance No.87 repeals any amendments to King County Title 9 which have occurred since the date (June 26, 1995) Ordinance No. 14 was adopted by the City.*
- ◆ Ordinance No. 154 amending Ordinance No. 14 for drainage review.
- ◆ Ordinance No. 22 adopting by reference Title 23 Enforcement of the King County Code as an interim regulation of the City. *Note: City Ordinance No. 92 repeals any amendments to King County Title 23 which have occurred since the date (June 26, 1995) Ordinance No. 22 was adopted by the City.*
- ◆ Shoreline Municipal Code 18.24, Environmental Sensitive Areas.

Other existing program elements that address this program element requirement:

- ◆ City now funds a Code Enforcement Officer position.
- ◆ City participates in the King County Interagency Regulatory Analysis Committee and the Regional Funding Advisory Committee.

Program Gaps

All cities, towns and counties in the Puget Sound Basin are required to adopt a stormwater management ordinance, with minimum requirements and BMPs equivalent to those in Volume I of Ecology's Stormwater Management Manual. Ecology's equivalency guidance dated March 1994 will be used to determine equivalence. Jurisdictions are

encouraged to consider adoption of the model Stormwater Management Ordinance, published by Ecology in the Stormwater Program Guidance Manual for the Puget Sound Basin (July 1992). The City is in the process of adopting new critical (sensitive) area regulations and stormwater regulations.

Program Element 2 – ADOPTION OF STORMWATER MANUAL CONTAINING BEST MANAGEMENT PRACTICES

Outcome

Cities, towns and counties in the Puget Sound Basin will minimize the contribution of stormwater pollution and the impairment of beneficial uses from new development and re-development through adoption and implementation of stormwater technical manuals.

Where We Are Today

Council directive that is consistent with this program element requirement:

- ◆ 1999 Council work plan priority to develop and adopt new codes that implement the policies of the Comprehensive Plan (Utilities Element Framework Goals # GF5 – page 93).
- ◆ The City adopted the 1992 King County Surface Water Design Manual.

The City ordinance and code that would address this program element is:

- ◆ The City adopted the King County 1994 Stormwater Design Manual per City Ordinance No. 14 adopting by reference Title 9, Surface Water Management, of King County Code as an interim regulation of the City. *Note: City Ordinance No. 87 repeals any amendments to King County Title 9 which have occurred since the date (June 26, 1995) Ordinance No. 14 was adopted by the City.*

Program Gaps

The adopted 1992 King County Surface Water Design Manual is outdated. The City is in the process of adopting the 1998 King County Surface Water Management Design Manual, with an addendum to modify the manual for City needs. The adoption would also include Department of Ecology's Urban Land Use BMPs Volume IV and future amendments by reference as the Source Control BMP Manual for the City of Shoreline.

Program Element 3 – **OPERATION AND MAINTENANCE
PROGRAMS AND ORDINANCES**

Outcome

All stormwater facilities, new and existing, public and private, are operated and maintained to ensure that they perform as designed to prevent or remove pollution and control flow from stormwater runoff.

Where We Are Today

Council directive that is consistent with this program element requirement:

- ◆ 1999 Council work plan priority to develop a code enforcement program reflective of City values.

City ordinances and codes that would address this program element are:

- ◆ Ordinance No. 14 adopting by reference Title 9, Surface Water Management, of King County Code as an interim regulation of the City. *Note: City Ordinance No. 87 repeals any amendments to King County Title 9 which have occurred since the date (June 26, 1995) Ordinance No. 14 was adopted by the City.*
- ◆ Ordinance No. 154 amending Ordinance No. 14 for drainage review.
- ◆ Ordinance No. 22 adopting by reference Title 23 Enforcement of the King County Code as an interim regulation of the City. *Note: City Ordinance No. 92 repeals any amendments to King County Title 23 which have occurred since the date (June 26, 1995) Ordinance No. 22 was adopted by the City.*
- ◆ Shoreline Municipal Code 18.24, Environmental Sensitive Areas.

Other existing program elements that address this program element requirement:

- ◆ The City adopted a three-year Public Works implementation plan to determine the best method of service delivery for street/drainage system maintenance. The implementation of this plan will include investigation and implementation of current best management practices for maintenance.
- ◆ Shoreline has created a City-wide surface water utility which includes a commercial and residential fee structure to ensure proper maintenance and operation of surface water facilities.
- ◆ City staff conducts annual inspections of residential, commercial, and regional detention facilities to ensure they are working properly. City facilities are fixed immediately when necessary, and commercial facility owners are notified of necessary maintenance. Commercial facilities are re-inspected when a notice of work completion is received.
- ◆ The City has a regular street sweeping and vector program through a maintenance interlocal agreement with King County Roads to improve water quality.
- ◆ City staff routinely inspects problem roadway drainage systems.

- ◆ City staff developed a drainage project evaluation process that includes a project ranking process with criteria such as: impacts to the natural system, improvements to local watershed needs, and impact on water quality/fish habitat.
- ◆ Participate in King Conservation District's Green Car Wash program.
- ◆ The City Surface Water Coordinator trained by King County Department of Natural Resources staff.
- ◆ King County Roads staff are trained in prevention and reduction of stormwater pollution.
- ◆ City Ordinance No.14 adopts Title 9 of King County Code as City's Interim SWM Code. This includes facility maintenance standards as specified in the 1994 King County Surface Water Design Manual.
- ◆ The City has a regular street sweeping and vector program through a maintenance interlocal agreement with King County Roads. King County follows State guidelines for disposal of street wastes.

Program Gaps

The City needs to evaluate whether the adopted (1995) King County stormwater management ordinances relative to operations and maintenance of stormwater facilities are consistent with Ecology's Stormwater Program Guidance Manual (July 1992). City ordinance may need to be revised to include enforcement and right-of-entry provisions for operations and maintenance activities.

City Parks crews and Development Services staff may need training to prevent and reduce stormwater pollution from local government operations.

Currently the City is under contract with King County Roads to provide street sweeping operations. The City needs to ensure that future service providers disposal of street waste is consistent with state regulations.

Program Element 4 – **PUBLIC EDUCATION PROGRAMS**

Outcome

All cities, towns and counties in the Puget Sound Basin will reduce pollution and impacts of stormwater through public education programs that encourage the public to take proactive, preventative approach to stormwater management.

Where We Are Today

Council directive that is consistent with this program element requirement:

- ◆ 1999 Council work plan priority to develop and adopt new codes that implement the policies of the Comprehensive Plan (Stormwater and Drainage Policy # EN41 – page 181).

Existing program elements that address this program element requirement:

- ◆ City staff educates owners of commercial stormwater detention facilities through the annual inspection program.
- ◆ Boeing Creek Education Initiative: The City, with funding from the Puget Sound Water Quality Action Team, has developed a three-pronged education effort to educate citizens about Boeing Creek and its impacts on Puget Sound. The initiative includes (1) creation of a water quality education curriculum for Shoreline Elementary Schools, (2) offering of several watershed community activities per month, and (3) creation of an intensive Watershed Keeper class.
- ◆ City staff educates developers through the stormwater plan review process.

Program Gaps

The City does not fund a long-term (City wide) stormwater education program. The grant that funds the Boeing Creek Education Initiative ended on May 15, 1999. The City needs to develop and implement a stormwater public education program aimed at residents and businesses throughout the City to inform them about the impacts of stormwater discharges on water quality.

Program Element 5 – GROWTH MANAGEMENT PLANNING AND INTERLOCAL COORDINATION

Outcome

Jurisdictions will incorporate the goals of the local stormwater program into the goals of the GMA (Growth Management Act under Chapter 36-70A RCW) comprehensive plan and will incorporate the stormwater management ordinance(s) into the development regulations.

In keeping with the intent of Chapter 39.64 RCW (the Interlocal Cooperation Act) neighboring jurisdictions will cooperate on stormwater, growth management and watershed or basin planning issues and concerns.

Where We Are Today

Council directive that is consistent with this program element requirement:

- ◆ 1999 Council work plan priority to develop and adopt new codes that implement the policies of the Comprehensive Plan.

City ordinances and codes that would address this program element are:

- ◆ Ordinance No. 22 adopting by reference Title 23 Enforcement of the King County Code as an interim regulation of the City. *Note: City Ordinance No. 92 repeals any amendments to King County Title 23 which have occurred since the date (June 26, 1995) Ordinance No. 22 was adopted by the City.*

- ◆ Ordinance No. 11 adopting by reference Title 21A of the King County Code as Interim Zoning regulations of the City.
- ◆ Ordinance No. 125 adopting a Revised Interim Zoning Code, and repealing Ordinance No. 11.

Other existing program elements that address this program element requirement:

- ◆ City staff are reviewing and revising the City's land use development codes to reflect the goals and policies of the City's recently adopted Comprehensive Plan.
- ◆ City Planning and Development Services staff review all development proposals for compliance with standards in the 1994 King County Stormwater Design Manual..
- ◆ The City's first Capital Improvement Program (CIP) has dedicated approximately \$4 million dollars within the Thornton Creek basin over the next six years to reduce flooding, improve detention, enhance habitat, and improve in-stream flows.
- ◆ Constructed a project at Shoreview Park to improve regional detention of stormwater urban stormwater that drains to Boeing Creek.
- ◆ The City actively pursues grants to fund activities and programs that would improve water quality and fish habitat.
- ◆ In 1998, the City worked with King County to reroute the outlet of Boeing Creek into Puget Sound to remove a fish barrier. Prior to this project, salmon could only enter the stream through two perched culverts during a very high tide. The stream now flows through an existing box culvert at grade, and the perched culverts serve as high flow bypass.
- ◆ The City of Shoreline is working with citizens, stakeholder groups, and the City of Seattle to develop a Thornton Creek Watershed Management Plan. The plan will be completed early in the year 2000 and will include completion of several action items chosen from the Plan's final action list.
- ◆ City staff and officials have been actively involved in the Cedar River/Lake Washington and Central Puget Sound Watershed Forums.
- ◆ City staff and officials are involved with the Regional Water Quality Committee (RWQC).
- ◆ City staff and officials have been actively involved in the WRIA 8 planning efforts.

Program Gaps

The City needs to incorporate the stormwater management ordinances into the development regulations. The capital facilities program needs to identify regional stormwater treatment facilities, including retention/detention basins, as well as stormwater conveyance systems. The City needs to cooperate with jurisdictions sharing common watersheds and basins, in analyzing the effects and control of stormwater runoff and adopt coordinated and compatible programs for stormwater management. In order to implement the policies of the Comprehensive Plan and meet the goals of the Growth Management Act, the City should conduct critical area inventories and develop watershed

plans for subbasins within the City. Special consideration should be given to identifying, prioritizing, and eliminating barriers to anadromous fish spawning and rearing habitat.