

CHAPTER 14: ACTIONS FOR TIER 3 SUBAREAS

Chapter 14: Land use and Public Outreach Actions for Tier 3 Subareas

TECHNICAL BASIS FOR TIER 3 ACTIONS:

Tier 3 subareas are defined by the watershed evaluation as those subareas with episodic or no Chinook spawning and with moderate or low watershed function. No specific scientific hypotheses were developed for Tier 3 subareas in the Conservation Strategy, and these action recommendations have not been reviewed by Technical Committee. The following technical guidance was used to generate Tier 3 actions:

- In Tier 3 areas with episodic Chinook use, conservation actions should focus on protecting and enhancing water quality and natural stream flow regimes to benefit other salmonid species and downstream areas used by Chinook (Conservation Strategy, pg. 4-3).
- Where forest cover is intact it should be maintained so that hydrologic processes are maintained and potential for adverse water quality impacts is minimized. Where forest cover is degraded, riparian buffer protection becomes especially important. If forest cover and riparian cover are both degraded, stormwater management actions to maintain water quality and quantity become critical. (W8TC meeting summary, Feb. 28, 2004)
- Tier map says: In these (Tier 3) subareas, land use and public education actions will be necessary to support protection and restoration of key habitat and habitat-forming processes.

The Technical Committee did generate hypotheses for tributaries as part of discussion of Tier 1 and 2 subareas. These hypotheses (listed in bold below) are used to organize the Tier 3 actions. Note that these hypotheses are interrelated, and many actions address both hypotheses.

Note also that these actions were developed by WRIA 8 service provider team. Although meetings were not held among Tier 3 jurisdictions to develop actions collaboratively as was the case with the Tier 1 and 2 comprehensive lists, many of these actions were discussed at the Tier 1 and 2 meetings.

CONTEXT OF TIER 3 SUBAREAS

Jurisdictions:

Almost all jurisdictions in WRIA 8 include Tier 3 subareas.

Percent of basin inside Urban Growth Areas (UGA):

Almost all Tier 3 subareas are within the UGA; some portions of Tier 3 subareas in Sammamish River, Issaquah and Cedar are outside UGA

TIER 3 ACTIONS

Technical hypotheses and recommended actions:

Protect and restore water quality in small tributaries [including protection and enhancement of natural stream flows]:

Land use actions:

Consistent with the Growth Management Act, areas inside UGA will continue to absorb most new residential, commercial, industrial growth. Control new development and redevelopment to minimize impacts on water quality and natural flow regimes.

- Address stormwater impacts from residential, commercial, industrial uses, through NPDES phase 1 and phase 2 municipal stormwater permit updates. Adopt and enforce regulations and best management practices consistent with Washington Department of Ecology's 2001 Stormwater Management Manual for Puget Sound (or beyond) to address water quality and flow impacts of urban and urbanizing areas.
- Address water quality issues, including temperature and pesticides/herbicides, through stormwater regulations, best management practices (including low impact development), education, and incentives.
- Adopt policies on pesticide use consistent with the January 2004 federal ruling banning certain pesticide use along salmon-bearing streams in the northwest. Application of pesticides should be in accordance with source control best management practices in Washington Department of Ecology's 2001 Stormwater Management Manual for Puget Sound. Consider also the Integrated Pest Management program that Seattle and King County apply on public lands.
- Adopt source controls of fine sediments and metals in mainstems and tributaries (e.g., from construction, sand on roads, bed scouring flows, farms) through stormwater management, clearing and grading ordinances, etc.
- Through planning for new roads or road widening projects, assess and recommend ways to minimize impacts on water quality, instream flows and sensitive areas. Prohibit new roads in floodplains.
- Work with Washington Department of Transportation and local jurisdictions to pursue opportunities to retrofit existing roadways to improve water quality treatment and spill containment.
- Adopt and implement Regional Road Maintenance Endangered Species Act (ESA) Program Guidelines for maintaining existing roads and drainage systems.
- Implement current and future TMDLs on 303(d) listed water bodies.
- Adopt stormwater provisions to address high flows, flashiness, and protection of base flows in creeks, including best management practices to improve infiltration, and on-site stormwater detention for new and redeveloped projects.
- Encourage low impact development throughout subareas through regulations, incentives, and education/training. Specific actions include:
 - Develop, adopt, and update as needed, local regulations and ordinances that improve the ability of builders to design low impact development projects, and for local government staff to review and approve those projects. For example, local staff from fire, surface water management, building, and public works departments have different responsibilities related to public and private development, and need to find solutions which can support low impact development.

- Incentives could include a Public Benefit Rating System-type tax benefit to developments which meet certain development standards, simpler permit review, reduced requirements for capital facilities.
- Provide guidelines and technical information to planners and developers about on-the-ground examples of what does and does not work in low impact development approaches; promote demonstration projects to show benefits and tradeoffs (in terms of technical stormwater management, cost, permitting, marketability).
- Monitor existing facilities (e.g., green roofs, permeable pavements, etc.) to improve understanding of and quantify benefits of low impact development techniques.
- Existing examples to show developers and planners include King County's three low impact development demonstration projects currently underway, Seattle's natural drainage program for retrofitting existing neighborhoods, Issaquah Highlands, and Maltby Joint Ventures-Chinook Homes.
- Address the issue of maintaining and restoring instream flows at all levels of government, recognizing that different aspects of the problem are controlled by different government agencies. For example, local jurisdictions affect low impact development standards; Department of Ecology regulates water rights.
- Work with Washington Department of Ecology, local health departments, and water suppliers on regulations, incentives, and education related to impact of surface and groundwater withdrawals, including municipal water withdrawals, illegal withdrawals, and exempt wells on flow conditions throughout basin.
- Determine extent of unauthorized withdrawals in all sectors (residential, agricultural, commercial, industrial). Work with Department of Ecology on education and enforcement of unauthorized water withdrawals (e.g., un-permitted withdrawals, permitted withdrawals that exceed authorized volumes).

Public outreach actions:

- Target Natural Yard Care Program to include those neighborhoods which drain into Tier 3 creeks. Tier 3 jurisdictions should also participate in the King County Local Hazardous Waste Management water quality postcard program which utilizes compelling photos and copy to encourage pesticide reduction.
- Expand groundwater protection outreach messages to include the relationship between ground and surface water and inter-connectedness of all hydrologic systems. Include messages in water utility billings, newspaper articles, and school curricula; explore opportunities to partner with business such as local bottled water company.
- Continue and/or extend availability of water conservation incentive programs (such as rebates for efficient toilets, appliances, free indoor conservation kits, free landscape irrigation audits); classes on native drought tolerant landscaping; outreach on rainwater harvesting and grey-water capturing for reuse in landscape irrigation makers; and waterless carwash promotions.
- Encourage rainwater harvesting and grey-water capturing for reuse in landscaping irrigation through demonstration projects, workshops and educational materials.
- Sponsor design competitions for innovative low impact development features, including clustered development, greater forest cover, reduced impervious pavement, green roofs. Combine a home/ garden tour or "Street of Dreams" type event featuring these landscape/engineering treatments.
- Use recognition as a means to encourage more salmon-sustainable designs and construction. In addition to professional association awards and Built Green certification, expand recognition to include merit awards celebrated by popular magazines such as *Sunset*, which is read by a broader sector of the general public.

- Continue to recognize businesses that carry out procedures or use products that protect watershed health.
- Coordinate with local business community and non-profits to encourage the use of commercial car washes and carwash kits. Reprint and distribute water quality poster series depicting impacts of everyday practices: washing car, driving car without maintenance, leaving pet wastes unattended, and using lawn chemicals improperly.
- Work with auto parts retailers and gas stations to increase potential for collection of used motor oil/transmission fluids.
- Build partnerships and seek outreach opportunities with commute trip reduction programs to convey the impacts of automobiles on water quality and salmon habitat. Encourage alternative transportation choices.
- Educate and support businesses, property management companies, and homeowners associations on stormwater best management practices, specifically related to parking lot cleaning, storm drain maintenance, and road cleaning.
- Publicize emergency call numbers for public to report water quality and quantity problems, non-permitted vegetation clearing, and non-permitted in-stream grading and wood removal incidents.
- Expand storm drain stenciling program.
- Develop public information about exempt wells, differences between water drawn from wells versus water diverted from streams without water rights permits, and support enforcement through development of citizen-based watchdog groups.
- Increase outreach regarding siting and maintenance of septic systems, and the disposal of hazardous waste into septic systems.

Coho runs in smaller tributaries should be restored as a control mechanism to reduce the cutthroat population [because cutthroat prey on juvenile Chinook in the lakes]:

Land use actions:

- Protect and restore habitat conditions in tributaries, to protect/restore water quality, riparian function, and forest cover to reduce effects of urbanization, including flashy flows, and therefore reduce conditions which would encourage cutthroat. Jurisdictions should hold the line on the Urban Growth Boundary. Specific actions are listed below; see also actions listed above for *water quality* and *flows*.
- Revise critical areas regulations and Shoreline Master Programs, and offer incentives to protect and restore forest cover, wetlands, and headwaters, including:
 - ✓ Manage new residential and commercial development to minimize impacts on forest cover, aquatic buffers, water quality, and instream flows, by emphasizing low impact development (see specific low impact development recommendations above under *water quality*).
 - ✓ Promote flexible development approaches, including: cluster development in order to preserve large contiguous natural areas; transferable development rights (TDRs) or environmental mitigation banking, to shift development to areas which are less environmentally sensitive and/or to mitigate impacts by restoring areas with highest ecological functions.
 - ✓ Protect and restore forest cover through tree retention and tree replacement programs, landscaping guidelines, street tree programs, and urban reforestation programs. If a percent forest retention standard is applied in some areas (e.g., like King County's proposed 65% forest cover-10% impervious surface), forest protection standards should

- take into account soils, substrate, topography, and vegetation to maximize retention and infiltration.
- ✓ Offer existing and new incentives to protect and restore riparian and upland parcels beyond those that are protected through regulations. Incentives include current use taxation (e.g., Public Benefit Rating system – PBRs), Native Growth Protection Area programs. Protection programs need a stewardship element to ensure management and maintenance of these areas over the long term, either through a local jurisdiction, non-profit organization, or private entity.
 - ✓ Where regulations and incentives are not sufficient, acquire key habitat as current opportunities for protection could be lost forever. Update basin plans to identify highest priority parcels for protection through acquisition or other means.
 - ✓ Identify and protect headwater areas, including seeps, springs, and wetlands. Consider using critical aquifer recharge area (CARA) protections more broadly to protect groundwater recharge for maintaining cold temperatures for fish bearing streams, rather than solely for groundwater quality protection for potable water supply.
 - ✓ Recognize importance of enforcement for all regulatory recommendations. Note that public education about why regulations exist is key part of making enforcement more effective. Effective enforcement must also include monitoring and adaptive management, so that effectiveness of regulations (and related mitigation projects) is measured, and adjustments are made over time.
- Adopt regulations and incentives to protect and restore riparian function, including vegetation and channel complexity, including:
 - ✓ Continue to tighten regulations affecting riparian buffers, including larger stream buffers, more restricted application of buffer averaging, fewer allowable uses in buffers (e.g., limiting trails, stormwater facilities). Could approve administrative variances of development standards (on case-by-case basis) in order to avoid encroaching into a sensitive area buffer.
 - ✓ Nonconforming uses are significant challenge in developed areas. Many existing structures along creeks encroach into required stream buffers and are nonconforming with development and environmental regulations. Degree of nonconformity could become even greater as buffers and other riparian protections become more restrictive. In order to decrease the level of nonconformity over the long term (e.g., 50 years), jurisdictions should encourage or require that development come into conformity, depending on the degree of redevelopment. A sliding scale could be applied where the greater the degree of redevelopment, the greater the expectation that the development come into compliance.
 - ✓ Encourage or require revegetation and enhancement of riparian buffers where existing buffer vegetation is inadequate (i.e., lacking in tree/shrub vegetation or dominated by non-native invasive species) to restore stream functions. Restoration should include underplanting of conifers in riparian buffers. Consider flexibility in prescriptive buffer width standards in exchange for stream habitat and buffer enhancement, particularly during redevelopment. However, buffer width reductions – even in exchange for riparian enhancement - should be restricted where riparian function has been compromised by development/encroachment in the floodplain and channel confinement. Stream buffer enhancement through revegetation is effective in addressing certain functions such as stream shading, microclimate control, and habitat diversity, but does not adequately address or offset impacts such as channel confinement, floodplain disconnectedness, and loss of channel complexity. Therefore, any granting of regulatory flexibility needs to analyze site-specific tradeoffs and impacts to the creek.
 - ✓ In order for incentive and technical assistance programs to be effective, they must receive adequate funding and be supported by technically trained staff. Additional incentives to encourage voluntary revegetation of riparian buffers include: providing expertise (e.g.,

provide templates for riparian planting plan, assist private landowners with applications for grants to restore habitat), and expediting the permit process at local, state and federal levels.

Public outreach actions:

- Expand outreach to streamside property owners about shoreline landscape design, maintenance, and alternatives to streambank armoring which favors Chinook predators. Convey through direct mailing of brochures (e.g., *Streamside Savvy*, *Going Native*); videos (*Natural Lawn Care*); shoreline homeowners kits given when home purchased; or, through workshops, including expansion of Natural Yard Care Program to include guidelines specific to shoreline residents.
- Offer educational opportunities to landscape designers/contractors on riparian design/installation, alternatives to invasive species, and use of compost.
- Increase number of development sites where native plant salvages occur and integrate native plant salvage opportunities into Naturescaping classes. Encourage class participants to take home native plants for immediate use both within and surrounding sensitive areas.
- Increase outreach concerning the benefits of trees and basinwide forest coverage to protect water quality and maintain instream flows. Coordinate with nurseries, home improvement centers, and arborists to develop a marketing campaign promoting the benefit of trees to salmon and watershed health.
- Encourage neighborhood garden tours of salmon friendly gardens to help residents visualize alternatives to traditional (and often less eco-friendly) landscape treatments. Offer neighborhood organizers assistance with publicity, signage, and volunteer docents.
- Employ basinwide stewards to work with property owners, land trusts, and agencies in order to identify and secure forested, wetland, and riparian areas, and to encourage the best management practices for those held in private ownership.
- Encourage neighborhood and community protection associations that foster the ethic of voluntary stewardship; gain community support for forest land acquisition; and build bridges between property owners, agencies, and local governments
- Work with land trusts to help with acquisition and/or restoration of prime or severely degraded habitat. Draw upon their skill at working with property owners who otherwise might be apprehensive about negotiating with governmental entities; provide information regarding stewardship endowments and resources to alleviate the financial burden for those wishing to donate streamside habitat easements.
- Increase citizen involvement in voluntary stewardship programs, focusing on restoration projects to meet the needs of the conservation plan through restoration, education, monitoring and restoration site maintenance. Link education and community service stewardship projects, e.g., high school community service requirements, Senior Projects, and colleges or university internships.