Building Cities in the Rain
Working Group
March 16, 2015
Meeting Summary

Participants: Bob Vadas, Washington State Department of Fish and Wildlife (by phone); Scott Stolnack, WRIA 8/King County (by phone); Erika Harris, Puget Sound Regional Council (by phone); Dan Gariepy and Anne Dettelbach, Department of Ecology; Heather Trim and Cailin Mckenzie, Futurewise; Doug Navetski, King County; Lorna Mauren, City of Tacoma; Andy Rheaume, City of Redmond; Bruce Wulkan, Puget Sound Partnership; John Palmer, EPA; John Lenth, Herrera; Anthony Boscolo and Heather Ballash, Washington State Department of Commerce.

Local fish data for flow control

The group revisited the discussion of local data needed for prioritization of watersheds for flow control transfers related to fish as follows. (This relates to questions from the Local Data for Flow Control Prioritization survey that the group reviewed on February 24.)

6. ***Is Class II (Type F [1]under DNR stream typing) Stream length in City data needed to prioritize watersheds? This is limited to the City limits.***
8. ***Is Class II stream length data that is not limited to the city limits (includes streams in other jurisdictions) needed to prioritize watersheds?***
9. ***Is significant salmon use data needed to prioritize watersheds? Redmond used observed significant salmonid use greater than 50/100 linear feet of channel, taken from Wild Fish Conservancy stream surveys in 2004 and 2005.***
10. ***Is Chinook Salmon data needed to prioritize watersheds?***
11. ***Is Coho use needed to prioritize watersheds?***
12. ***Is other salmonid use relevant to the jurisdiction needed to prioritize watersheds?***

(These six questions were considered together)

The group agreed that **potential fish use is also essential data to have.** Available data for fish use and potential fish use that was discussed includes:

- SalmonScape web site is maintained by WDFW – it provides a computer mapping system for salmon recovery planners. It has lifestage information for the mainstems and named tributaries. It provides a pretty good first cut. However, it will need to be verified and refined by local data and knowledge, especially for smaller or un-named tributaries that might be the focus of watershed prioritization. It also does not include trout data.
    - Barrier information is important for determining fish potential, and is shown in SalmonScape.
- WRIA Recovery Plans
- Some county-specific data – e.g. King County fish distribution map
- City stream data – cities know where their streams are located
- Watershed characterization habitat data, refined by local data
- Salmonid Stock Inventory (SaSI) reports describe and categorize the status of 435 salmon and steelhead stocks.

[1] Type F streams include actual or potential fish use.

Notes/comments:

- If a stream goes up into a less developed area, then may want to prioritize that stream. Context will be important to understand the habitat well.
- Tacoma would only look at fish potential as all of its streams are piped with massive barriers.
- Re: leveraging retrofits and habitat restoration: It would be great to build a regional stormwater facility that also removed physical barriers to fish movement. While stormwater retrofit requirements don't involve restoration, there could be an opportunity for environmental lift (multiple benefits).
    - Redmond intends to remove culverts as they build stormwater retrofits. A city wouldn't want to do instream improvements until they address flow. A city wouldn't want to prioritize a stream if it didn't remove barriers for fish – it would make it a lower priority.
- Any jurisdiction's prioritization will stand alone. Jurisdictions must be able to explain the basis for the prioritization. The end game could be different depending upon the jurisdiction.
- Biological data and water quality might become more critical because there is not a lot of differentiation between urban streams in terms of physical degradation—all urban streams are degraded.

14. Is tree canopy percentage cover in stream buffers needed to prioritize watersheds?
16. Is data on the percentage of 100-foot <u>stream</u> buffers that is vegetated needed to prioritize watersheds? (All vegetation excluding landscaped and mowed or plowed land is included - trees, shrubs, and unmowed grasses. Limited to city limits.)

The group agreed to change their decision regarding **tree canopy and 100-foot stream buffers** from nice to have data to **essential to have** at this point in the process. The extent of intact buffers throughout a stream system correlate well with fish/recovery potential. Forested streams provide more bang for your investment, and 100-foot buffers provide a lot of ecological functions. Tree canopy could be used as a tiebreaker between two otherwise equally ranked watersheds. Tree canopy and buffer width information is easy using aerial photography.

Notes/comments:

- This data addresses tree canopy along streams. Land cover addresses tree cover throughout the watershed.
- Quality and quantity of stream buffer data may be a bit spotty.
- Use 100' buffer as the measure, rather some regulatory-based buffer width. The 100' width has meaning from an environmental health standpoint.
- Like locals thinking about buffers and greenscapes as stormwater assets.

18. Is known water quality impairments data (waterbody is identified on the Ecology 303(d) list as a category 5 or 4B due to impairment from the indicated water quality parameter) needed to prioritize watersheds?
19. Is high temperature data needed to prioritize watersheds?
20. Is low dissolved oxygen data needed to prioritize watersheds?
21. Is high fecal coliform bacteria concentration data needed to prioritize watersheds?
(These four questions were considered together.)

The group decided that, per question #18, **<u>known</u> water quality impairments are essential data to have**. Ecology will be asking for water quality impairment data anyway. The other data – high

temperature, low dissolved oxygen, fecal coliform - are nice to have. The group did not want to require that water quality data be collected to undertake the BCitR prioritization process.

17. Is Benthic Index of Biotic Integrity (BIBI) data needed to prioritize watersheds?

BIBI is still essential to have (where it is appropriate to collect BIBI). Fish-IBI is good data where it is available but can be hard to interpret, since it is stream size-dependent. The group agreed that **"resident fish data"** (this term was preferable to F-IBI) **is essential to have where it is available**. Resident fish can provide a better picture of stream health than anadromous fish.

Overall notes:

- It was requested that a city articulate whether its prioritization is part of a salmon recovery plan. The group noted that this is already covered in the operating assumptions but acknowledged that "alignment with certain existing plans/priorities" could be a tiebreaker criterion.
- WRIA 8 focuses on main water bodies, not the tributaries. Actual projects are probably for larger water bodies. But a watershed plan might identify smaller water bodies for strategies. A city should make sure it is aligning with watershed groups.

<u>Other Possible Prioritization Criteria</u>

The group discussed whether the presence of valuable wetlands should be a consideration but decided, ultimately, that BCitR should not establish a separate wetlands criterion.

<u>Current Operating Assumptions</u>
The group agreed to add the following operating assumption:

> 12. While the focus of this guidance is on cities as sending and receiving areas, the group is not closing the door to prioritizing watersheds as receiving areas in the county. It would require an interlocal agreement between the city and the county. [NOTE: Such a transfer, while possible, could present an accounting challenge.]

<u>Screening/Tiering/Phasing</u>
The purpose of first and second screens/tiers/phases (will use the term phases for now) is to have a prioritization approach for narrowing down what watersheds to prioritize. The group discussed whether the phasing process should be binary – is a watershed in or out of the program, or whether it should take a first cut at prioritization (e.g., by application of something like the Puget Sound Watershed Characterization Process) and then somehow identify watersheds that need additional data/information to be fully classified and prioritized. An approach that is binary – leaving a watershed in or out – could be problematic. A system of weighting was also discussed – having two levels of screens inherently provides a weighting approach.

Proposal:

- Phase 1 – Can support fish - actual or potential fish use (salmonid and resident fish)?
    - Presence of culverts
    - Tree canopy/condition of buffer
    - BIBI
    - Known water quality impairment
    - Buffers conditions (not sure whether this ended up in Phase 1 or 2)

- Phase 2 – Identifiable stormwater impacts and an opportunity for lift that is cost effective?
    - Percentage of impervious area
    - Age and condition of infrastructure
    - Jurisdictional influence – within jurisdictional control
    - Potential for growth/zoning
    - Ripeness to proceed
    - Buffer conditions (?)

- Phase 3 – Intangibles: Retrofitting the watershed aligns with other plans (opportunities for investment)/tipping point between two watersheds that are otherwise equal?
    - Salmon recovery plans
    - TMDL plans (are moving into stormwater more and more)
    - Puget Sound Partnership goals

Notes:

- These are data, not criteria. What will be prioritized is a basin:
    1. With a clear resource value but that is not pristine.
    2. That has identifiable stormwater impacts, such as flow.
    3. That has a measure of uplift opportunity.
    4. That has other habitat opportunities/co-investments.
- Reminder: The City of Redmond's first phase was a watershed analysis. The City had four buckets: Protection Watersheds, Highest Restoration Watersheds, Restoration Watersheds, and Restoration Development Watersheds. Redmond prioritized the Highest Restoration Watersheds for the first retrofits because it would provide the most environmental lift. The group agreed that they don't want the watersheds in the worst or best condition, but those in the middle with the most opportunity for lift.
- Tacoma will not try to prioritize until the most egregious issues are addressed. It won't try to trade at the beginning. But it will be interested in trading at the marine level with outfalls to saltwater.
- This is not a must do list, but would be associated with what applies in a particular jurisdiction. There are some data points that will not be needed. This is consistent with the draft Ecology guidance.
- The environmental community will need some pretty strong criteria for what a jurisdiction has to do, with some flexibility. It cannot be too loose.
- The process needs to be iterative. Needs some bounds, but then needs some flexibility.
- The prioritization has to be defensible. If a jurisdiction looks at the data and then uses best professional judgment, it should explain how that professional judgment was used.

<u>Next meeting dates</u>:

- March 31, 10:00 a.m. – 1:00 p.m., Puget Sound Regional Council
- April 20, 10:00 a.m. – 1:00 p.m., City of Tacoma Central Wastewater Treatment Facility