

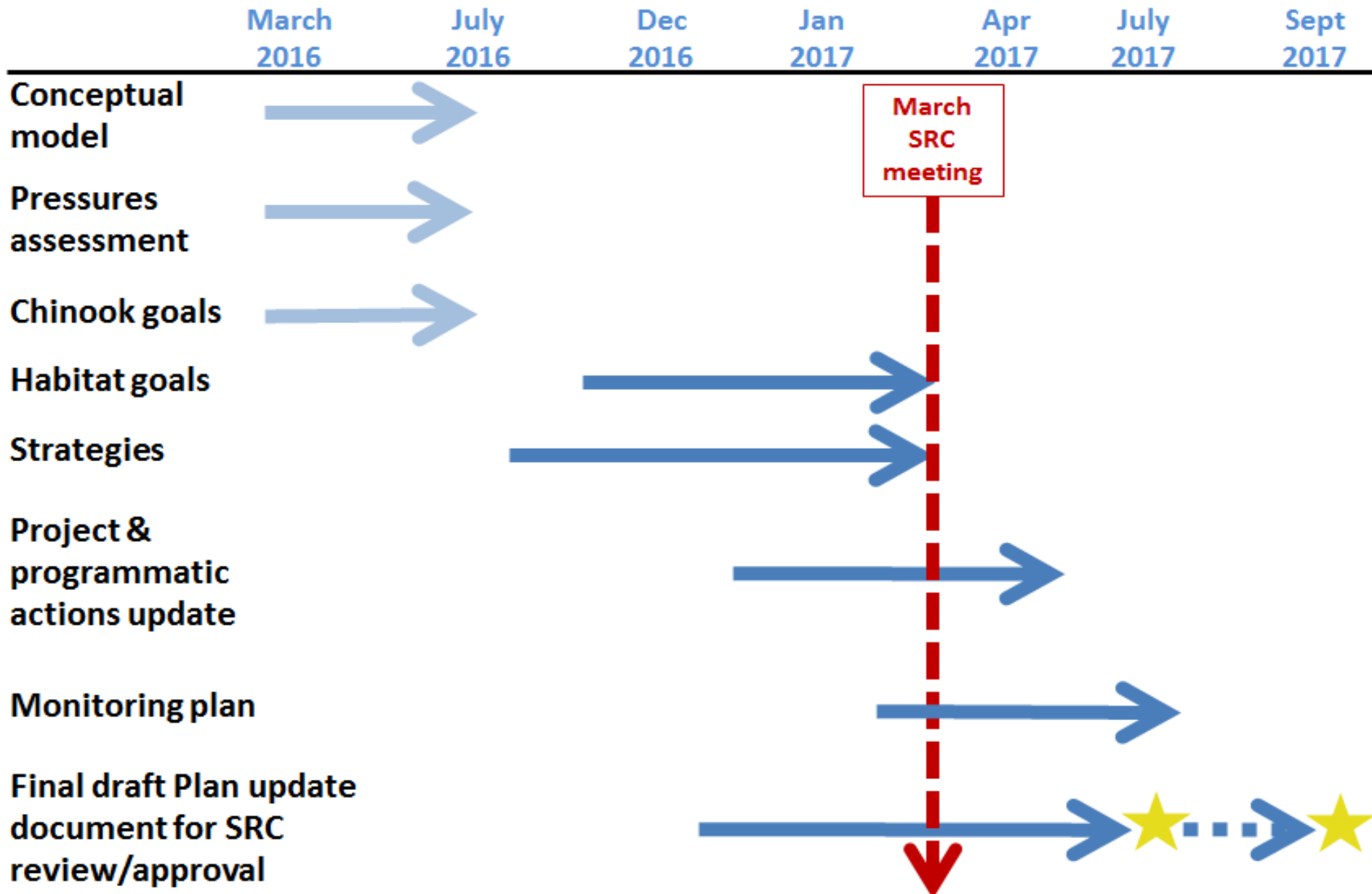
WRIA 8 Chinook Salmon Conservation Plan Update Policy Decisions

WRIA 8 Salmon Recovery Council

March 16, 2017



Plan update schedule – Where are we?



Purpose – Policy Decisions

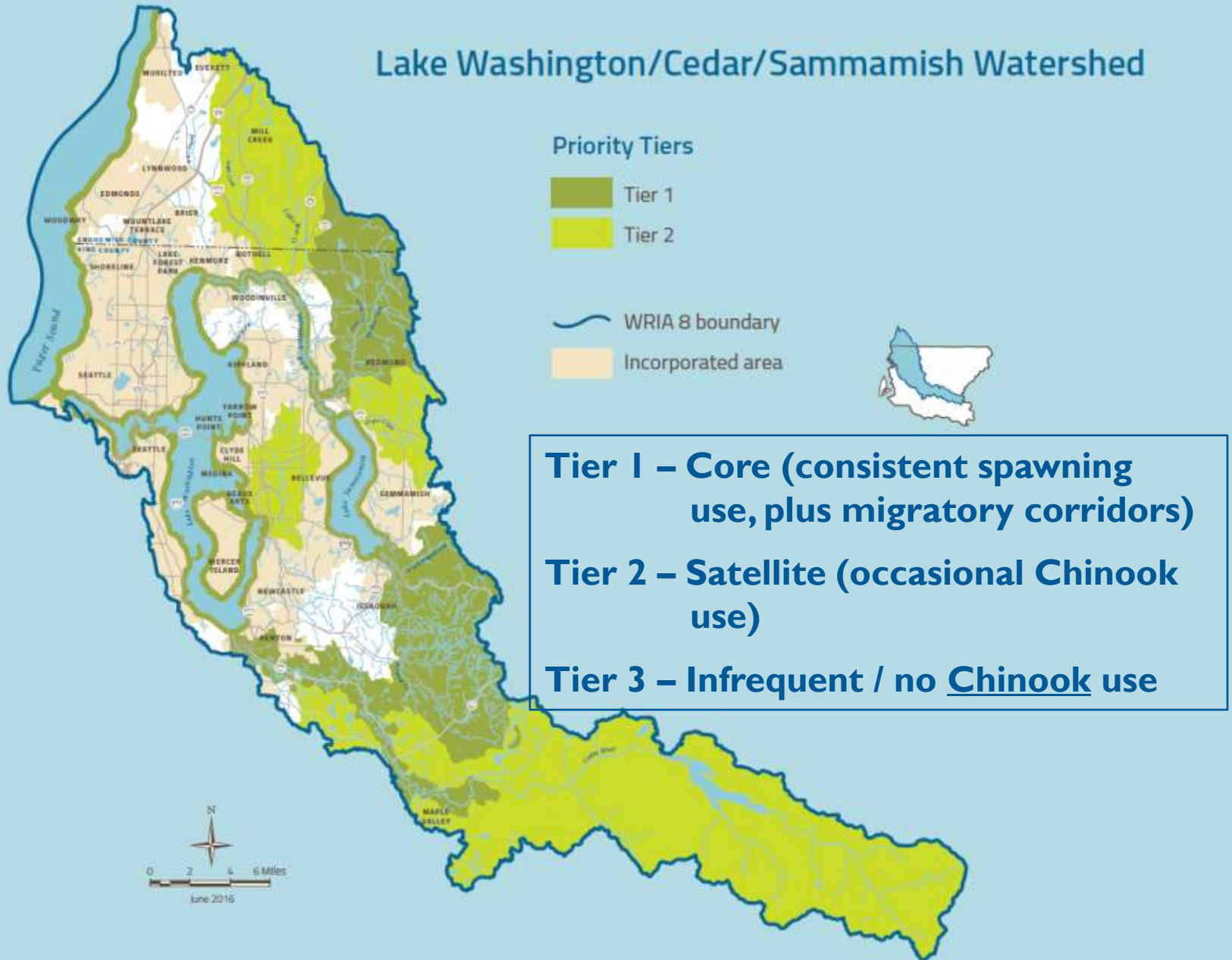
Seeking decision on joint Technical/Implementation Committee recommendations:

1. *Habitat / stream “Tier” designations*
2. *Habitat goals*
3. *Recovery strategies*



1. Habitat / stream "Tiers"

Lake Washington/Cedar/Sammamish Watershed



Habitat / Stream “Tier” Designations

Cedar River

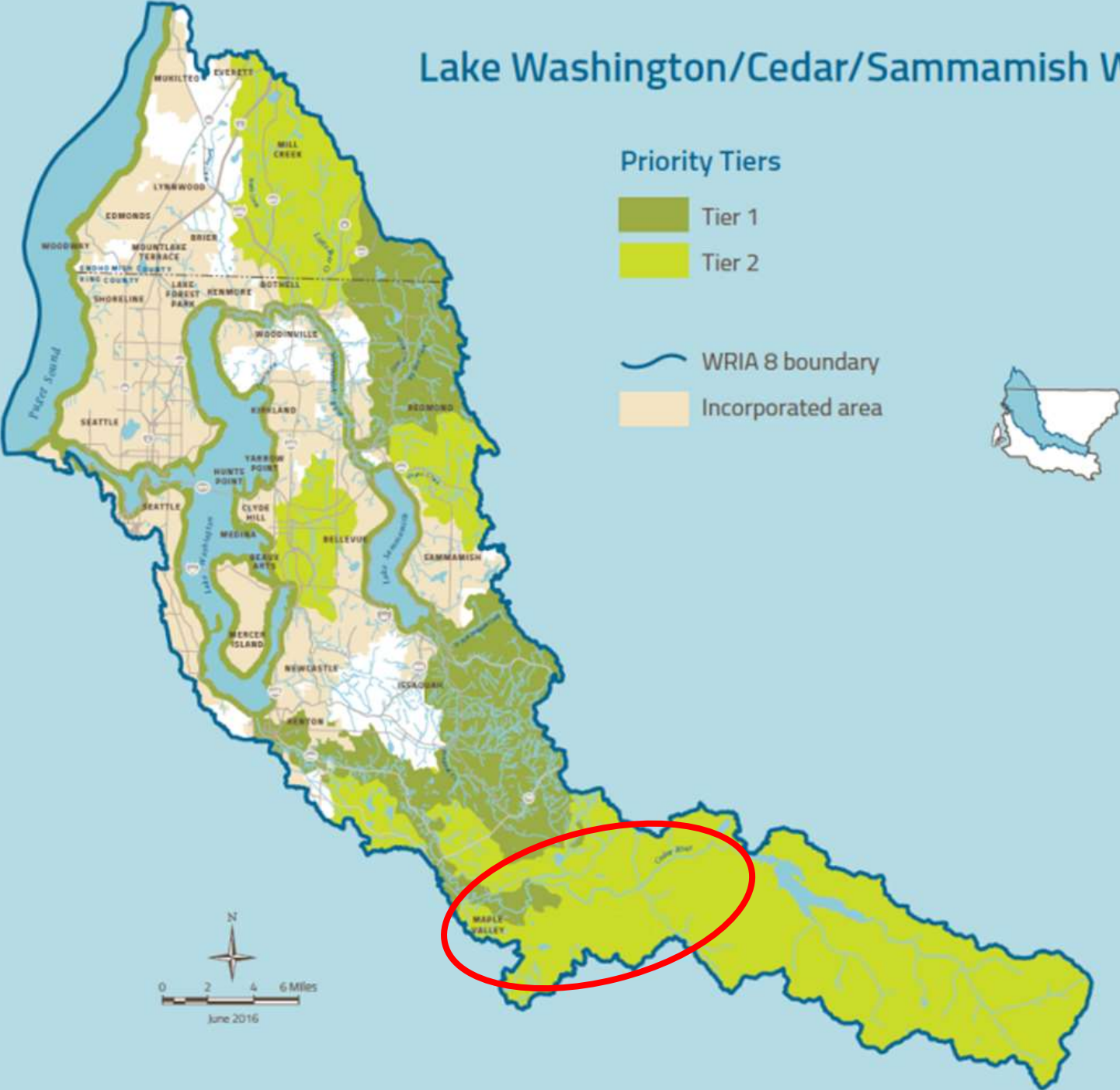
- In 2005 – upper watershed = Tier 2
- Since 2005 – regular, significant use by Chinook

TC/IC Recommendation:

- Change upper Cedar River watershed (above Landsburg Dam) from Tier 2 to Tier 1



Lake Washington/Cedar/Sammamish Watershed



Habitat / Stream “Tier” Designations

Sammamish River

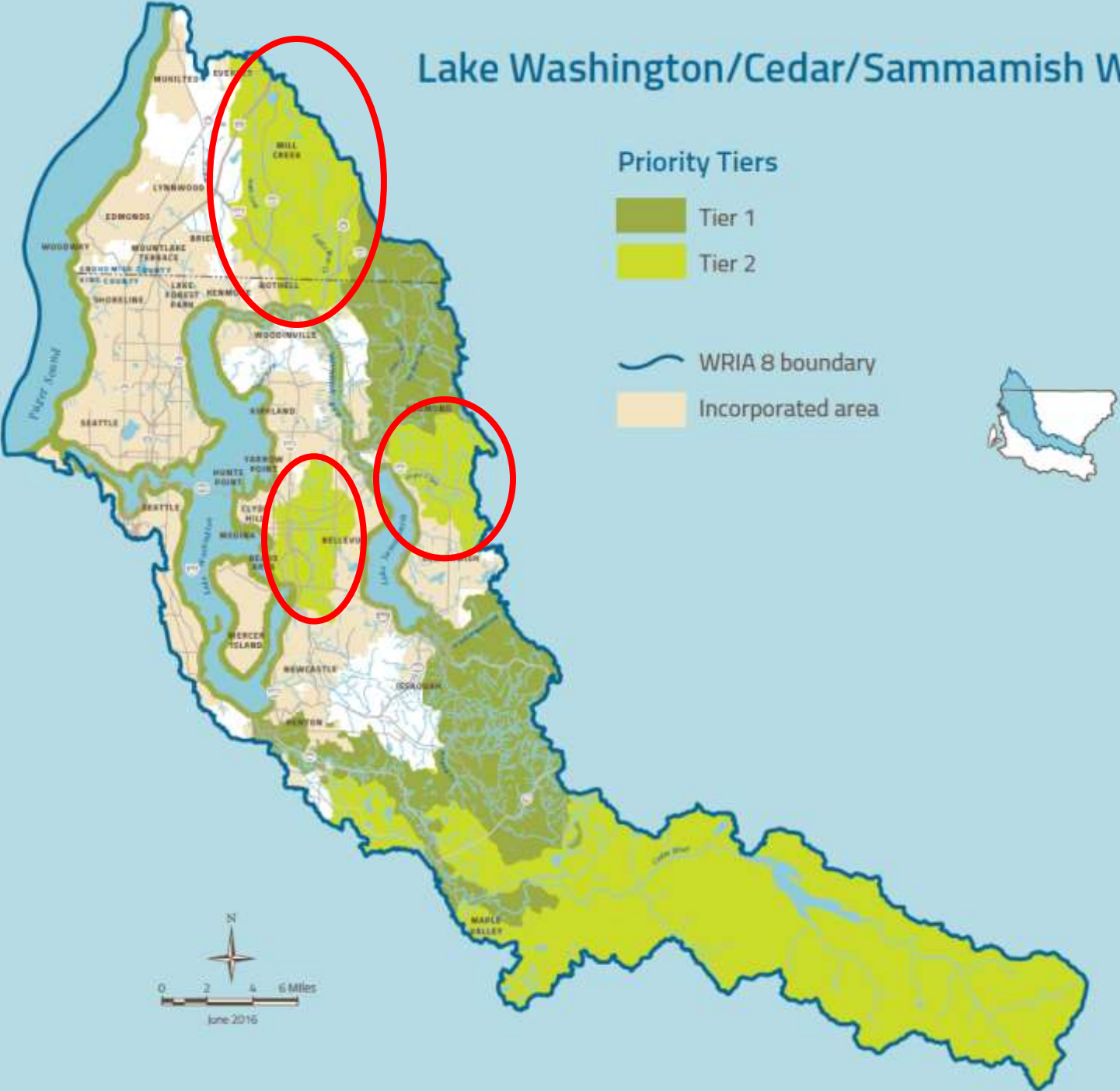
- In 2005...
 - Tier 2 streams (North, Little Bear, Kelsey, and Evans Creeks) intended to support N. Lake Washington population (Bear)
- Since 2005...
 - Tier 2 streams continued as part of recovery strategy
 - Monitoring shows declining Tier 2 stream habitat conditions

TC/IC Recommendation:

- Continue to include Tier 2 streams as necessary for recovering Sammamish population; set habitat goals.



Lake Washington/Cedar/Sammamish Watershed



2. Habitat Goals

- No quantitative habitat goals in 2005 Plan
- Goals provide targets for restoration. Allow us to monitor and adjust appropriately.
- Why select these goals?
 - *Focus on key habitat bottlenecks*
 - *Ambitious, but feasible*
- Near-term (2025) and long-term (2055)
- Developed goals for:
 - *Cedar River*
 - *Sammamish River*
 - *Wadeable streams (Tiers 1 and 2)*
 - *Lake Washington and Lake Sammamish*
 - *Marine nearshore*



Cedar River Goals

- Total connected floodplain acres between Lake Washington and Landsburg Dam will be 1,170 acres by 2025.



- Increase average wood volume four times over current basin conditions (RM 4 to Landsburg Dam) by 2025. (i.e., from 10.4 m³/100m to 42 m³/100m)



Sammamish River Goals

Areas of river are cool enough to support Chinook migration and survival by 2025.



Before – 1997



After – 2013



Wadeable Stream Goals

- Area of riparian cover in each Tier 1 and Tier 2 stream increases by 10% over current conditions by 2025.
-
- Average wood volume doubles over current basin conditions by 2025.



Lakes Goals

- Natural lake shoreline south of I-90 (Lake Washington) and throughout Lake Sammamish doubles over current conditions by 2025.
- Natural riparian vegetation within 25 feet of shoreline south of I-90 (Lake Washington) and throughout Lake Sammamish doubles over current conditions by 2025.



Marine Nearshore Goals

Pocket estuaries (i.e., stream mouths) along WRIA 8 shoreline support juvenile Chinook for rearing and migration.



Habitat Goals – Decision

TC/IC Recommendation: Approve habitat goals as presented



3. Recovery Strategies

- Need to update and clarify recovery strategies
- Driver for recovery efforts – bring together other Plan update elements to guide actions
- Technical and Implementation Committees developed list of 20 recommended strategies



Recovery Strategies – Format

Format for describing each strategy in the Plan update will include:

- Description
- Negative impact it reduces
- Positive benefit it increases
- Life stage affected
- Where in the watershed it is most relevant
- Relevant types of project and programmatic actions



WRIA 8 Updated
Recovery Strategies



Protect/Restore Floodplain Connectivity



DESCRIPTION: Floodplains provide crucial habitat for juvenile salmon to rear and find refuge from floods and predators. Connected floodplains and associated riparian and in-stream habitat provide sources of large woody debris that slow down fast-moving water and create channel complexity through braiding and formation of side channels, backwater channels, and off channel wetlands. In addition, improved hydrologic connectivity of surface and groundwater provides a source of cold water and reduces the impacts of increased water temperatures. This strategy will decrease the negative impacts of nearby land use, levees and revetments, problematic peak flows and low flows, and increased sediment and pollutants. It will also promote resilience to effects of climate change. Monitoring data suggest that—for the Cedar River especially—rearing capacity is a greater limitation than spawning capacity, and restoring floodplain connectivity is the best way to address this limitation.

FOCUS AREAS:

- Highest priority – Cedar River from Landsburg Dam to Lake Washington
- Sammamish River – feasibility to implement may be limited
- Issaquah Creek – throughout sub-basin—including Carey and Holder Creeks—with restoration especially important along Lower Issaquah Reaches 1 – 7 and Lower North Fork and East Fork
- Bear Creek – throughout sub-basin, with restoration especially important along Lower Bear Reaches 1 – 7 and Cottage Lake Creek Reaches 1 & 2
- North, Little Bear, Evans, and Kelsey Creeks, where opportunities exist

LIFE STAGE: Juvenile rearing, especially parr migrant stage in Cedar



Recovery Strategies – Highest priority

- Protect/restore floodplain connectivity
- Protect/restore functional riparian vegetation
- Protect/restore channel complexity
- Restore shallow water rearing and refuge habitat
- Reconnect and enhance creek mouths
- Protect/restore cold water sources and reduce thermal barriers to migration
- Improve juvenile and adult survival at the Ballard Locks
- Reduce predation on juvenile migrants and lake-rearing fry



Recovery Strategies – The rest

- Remove (or reduce impacts of) overwater structures
- Remove fish passage barriers
- Protect/restore forest cover and headwater areas
- Provide adequate stream flow
- Restore sediment processes necessary for key life stages
- Restore natural marine shoreline
- Reconnect backshore areas and pocket estuaries
- Protect/restore marine water/sediment quality, especially near commercial and industrial areas
- Improve water quality
- Integrate salmon recovery priorities into local and regional planning, regulations, and permitting (SMP, CAO, NPDES, etc.)
- Continue existing and conduct new research, monitoring, and adaptive management on key issues
- Increase awareness of and support for salmon recovery

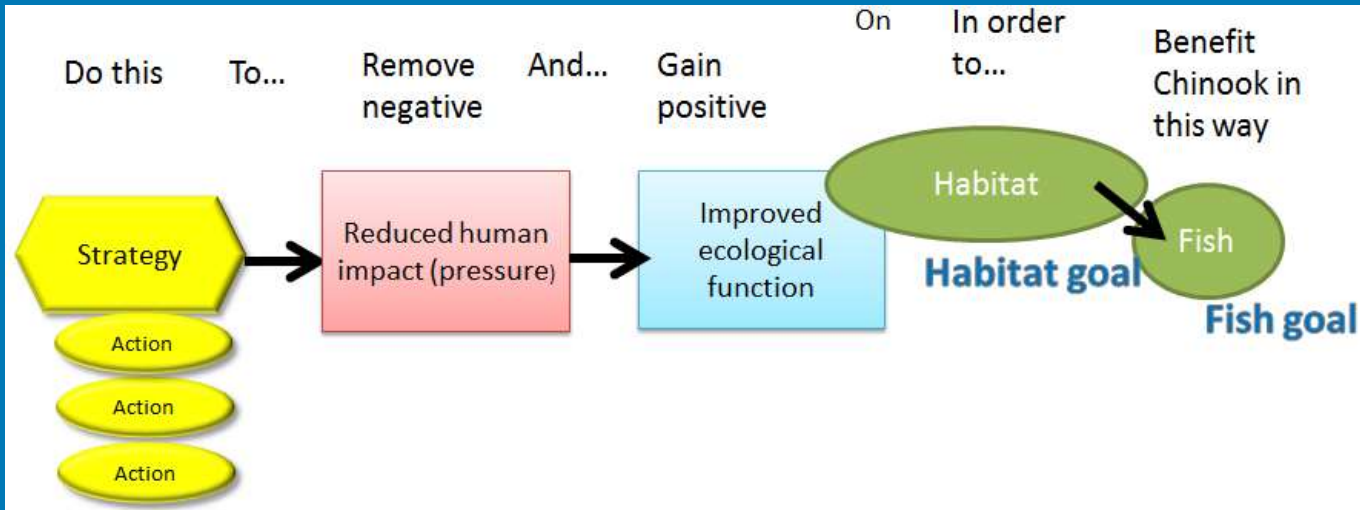


Recovery Strategies – Decision

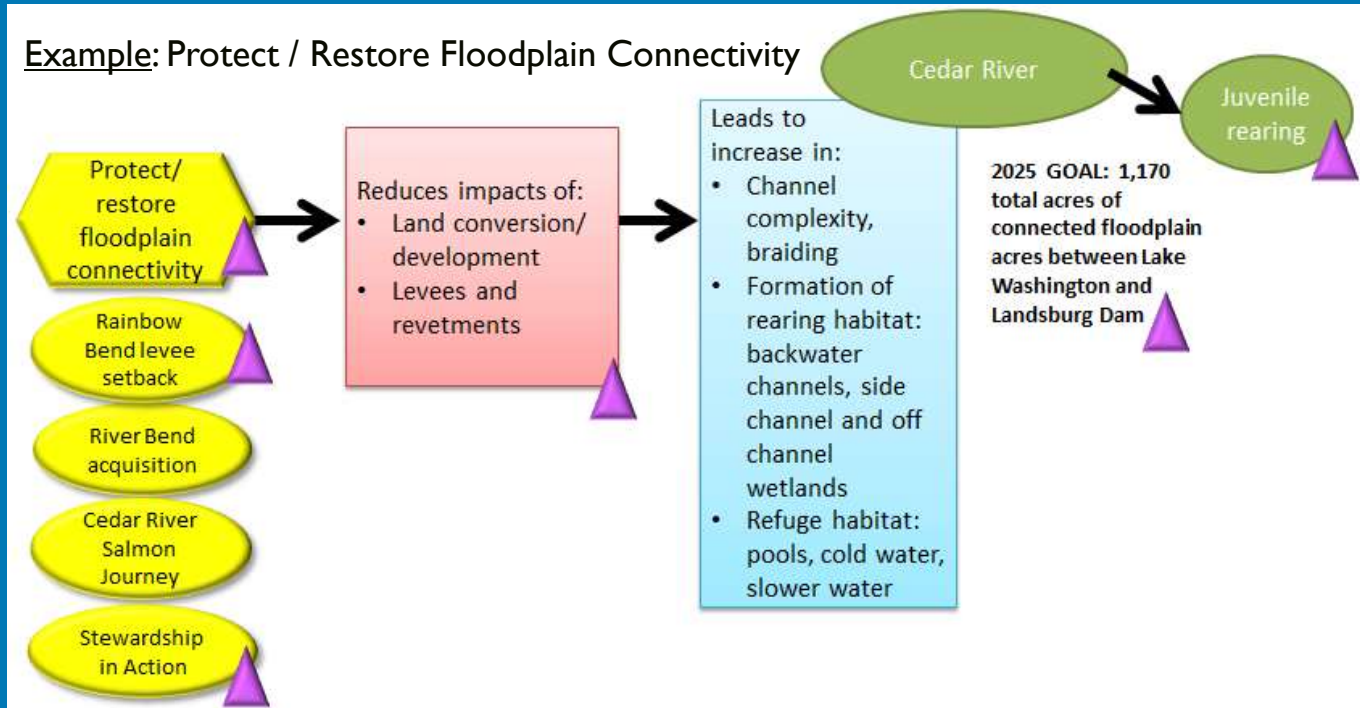
TC/IC Recommendation: Approve list of 20 strategies and format for describing them in detail in the Plan update.



Pulling it all together



Example: Protect / Restore Floodplain Connectivity



Recap Decisions

- Designate upper Cedar River Tier I
- Habitat goals
- List of 20 recovery strategies and format for describing them in the Plan update



Questions??

