Chief Joseph Hatchery Program Step 2 Submittal

Presentation Overview

1. Project History and Overview
2. Summary of Program
3. Step 2 Activities, Status and Accomplishments
   - ❑ Project management
   - ❑ Cost Share
   - ❑ Research
   - ❑ Preliminary Engineering Design
   - ❑ Environmental Compliance
   - ❑ Land Acquisition and Lease
4. FCRP Biop
5. Next Steps

Project History and Overview

Project History

- **December 2001**
  Colville Tribes submits proposal #29040 *Develop and propagate local Okanogan River summer/fall Chinook*

- **May 2004**
  Colville Tribes submits *Step 1 CJHP Master Plan*

- **January 2005**
  ISRP completes review of *Step 1 CJHP Master Plan*

- **March 2005**
  Council approves Master Plan, initiation of *Step 2 planning* for CJHP, including the summer/fall and spring Chinook components and two critical research studies

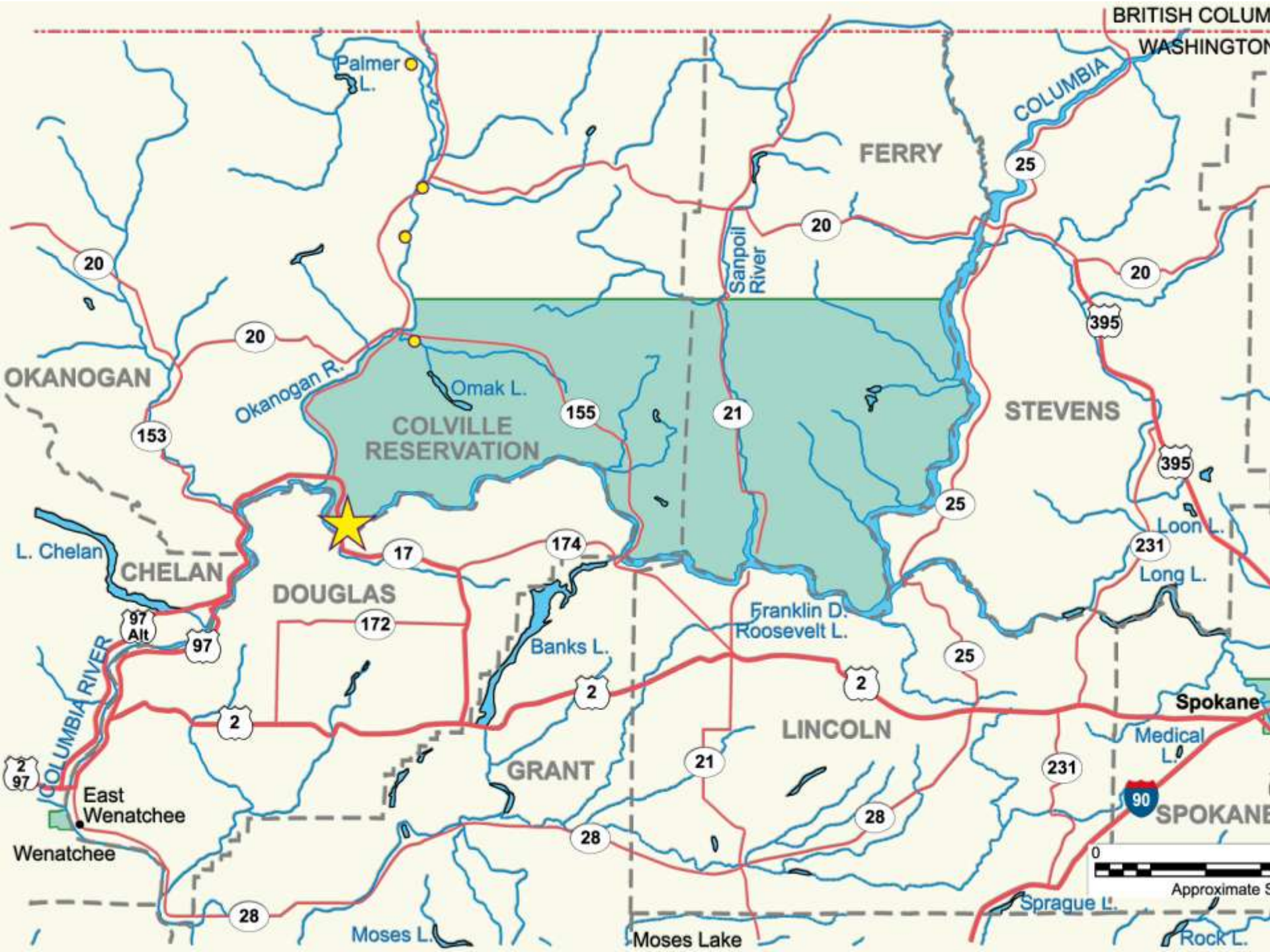
- **January 2006**
  Colville Tribes submits *FY 2007-2009 Project Proposal* and *FY05 Step 2 Progress Report* including responses to ISRP questions

- **November 2007**
  Colville Tribes submits *Step 2 CJHP document*

- **March 2008**
  Colville Tribes receive initial response from ISRP (NPCC)

- **April, May 2008**
  Colville Tribes providing response to ISRP review**. Further response requested**

- **November 2008 - March 2009**
  Colville Tribes provide revised responses provided to ISRP


BRITISH COLUM
WASHINGTON
Palmer L.
COLUMBIA
FERRY
25
20
Sanpoil River
20
20
395
OKANOGAN
20
Okanogan R.
Omak L.
155
21
COLVILLE RESERVATION
STEVENS
153
395
25
Loon L.
231
L. Chelan
CHELAN
17
174
Long L.
DOUGLAS
97 Alt
97
172
Franklin D. Roosevelt L.
Banks L.
25
2
2
Spokane
COLUMBIA RIVER
LINCOLN
Medical L.
2
97
GRANT
21
231
East Wenatchee
90
SPOKANE
28
28
Wenatchee
0
Approximate S
28
Sprague L.
Moses L.
Moses Lake
Rock L.

Program Overview - Goal

Summer/fall Chinook

- **Integrated recovery program:** increase abundance, productivity, distribution, and diversity of naturally spawning populations within historical habitat

- **Integrated harvest program:** support tribal ceremonial and subsistence fishery; provide increased local recreational fishing

Spring Chinook

- **Integrated recovery program**: reintroduce spring Chinook to historical habitats

- **Isolated harvest program**: restore stable ceremonial and subsistence fishery and increase recreational fishing opportunities

Program Overview - Salmon Management

Summer/fall Chinook

- Chinook to be **released at Chief Joseph Hatchery** to supplement Tribes' terminal fishery and local recreational fishery

- Chinook to be **released from new and existing acclimation ponds** along the Okanogan River

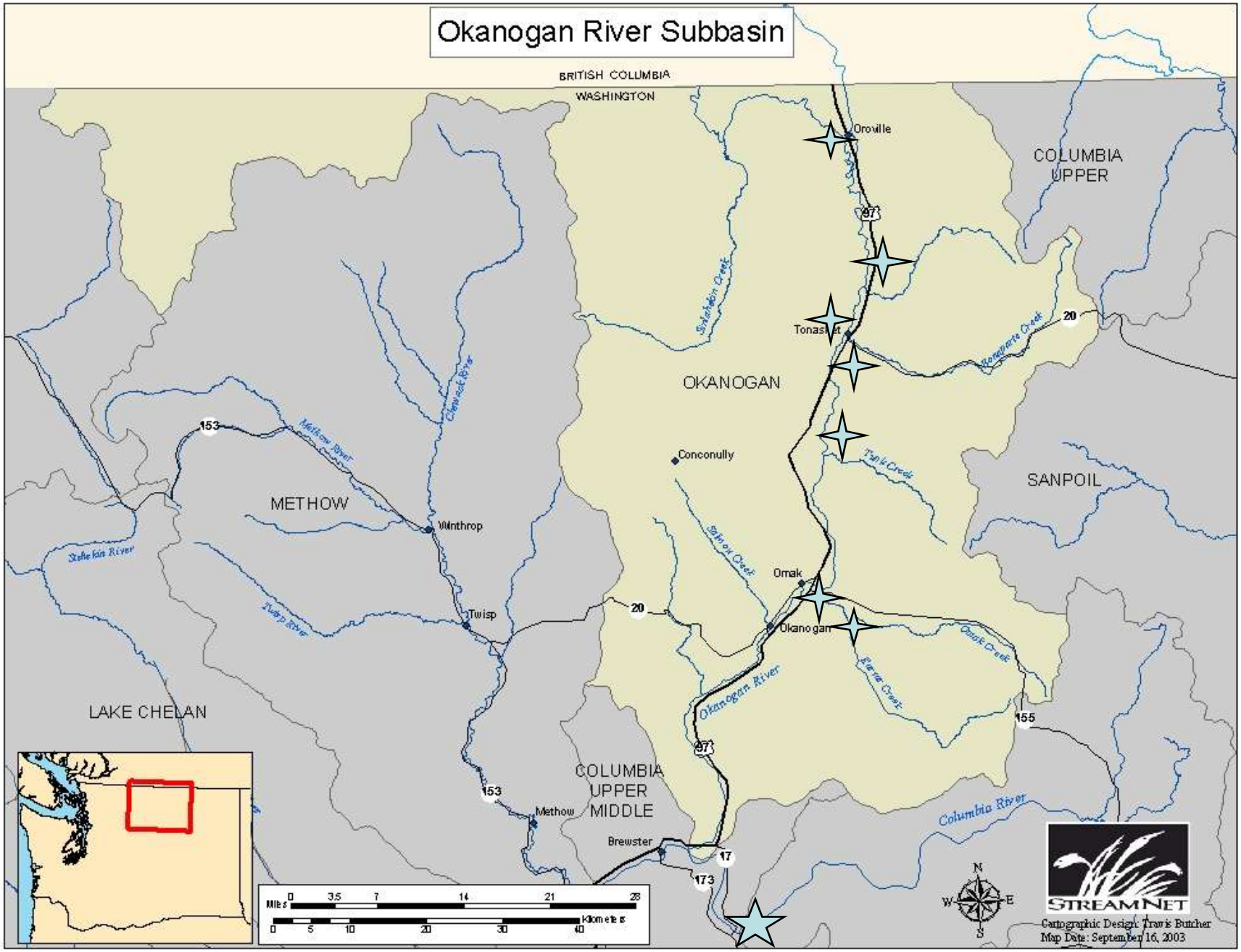
- Tribes' to develop **selective fishing gear** and in-lieu sites to harvest primarily hatchery-origin fish

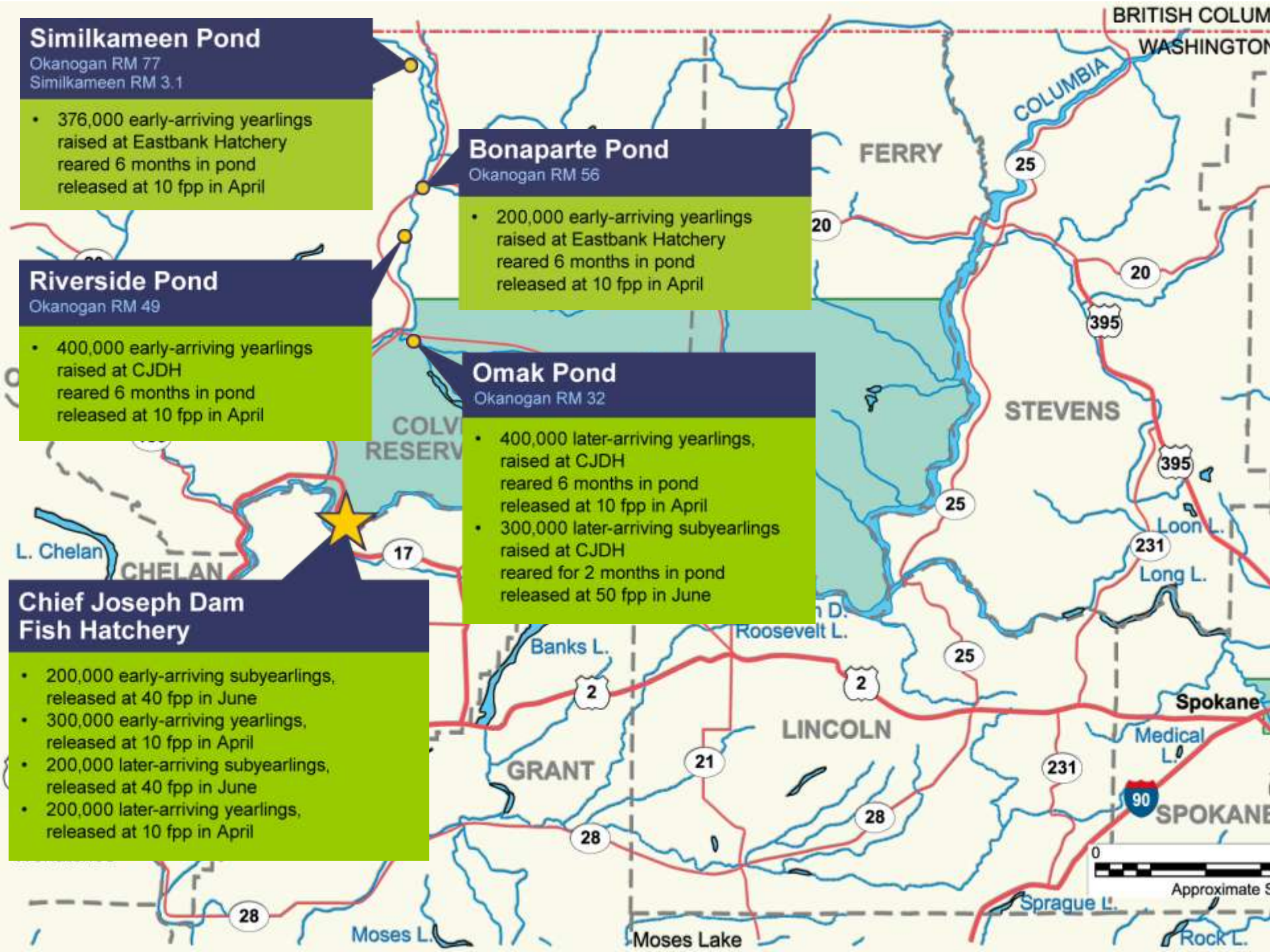
Program Overview - Conservation Actions

- Summer/fall Chinook
  - Initiate **local broodstock** for Okanogan River
  - **Avoid co-mingling** with Methow and Wells Hatchery summer/fall Chinook
  - Expand broodstock collection by 2 months, to the **entire run** of summer/fall Chinook, July thru November
  - Propagate both the **yearling and sub-yearling life histories** to achieve full, natural diversity
  - Improve **spawning distribution** of Chinook to historical habitats
  - **Control proportion of hatchery-origin fish** spawning in the wild

Program Overview - Harvest Actions

- Summer/fall Chinook
  - **Mark all** hatchery Chinook
  - Initiate Tribal **live-capture, selective fisheries** – targeting hatchery-origin Chinook in a terminal location
  - **Optimize escapement** of hatchery Chinook in the naturally-spawning population
  - **Share harvest opportunity** with recreational anglers in local communities


Okanogan River Subbasin
BRITISH COLUMBIA
WASHINGTON
Oroville
COLUMBIA
UPPER
97
Similkameen River
Tonasket
Aeneas Creek
20
OKANOGAN
Chewack River
153
Methow River
Conconully
Salmon Creek
SANPOIL
METHOW
Winthrop
Similkameen River
Omak
Twisp River
Twisp
20
Okanogan
Omak Creek
Okanogan River
Loup Loup Creek
LAKE CHELAN
155
97
COLUMBIA
UPPER
MIDDLE
153
Methow
Columbia River
Brewster
17
173
Miles 0 3.5 7 14 21 28
Kilometers 0 5 10 20 30 40
N
W
E
S
STREAMNET
Cartographic Design: Travis Butcher
Map Date: September 16, 2003


Similkameen Pond
Okanogan RM 77
Similkameen RM 3.1
• 376,000 early-arriving yearlings raised at Eastbank Hatchery reared 6 months in pond released at 10 fpp in April
Bonaparte Pond
Okanogan RM 56
• 200,000 early-arriving yearlings raised at Eastbank Hatchery reared 6 months in pond released at 10 fpp in April
Riverside Pond
Okanogan RM 49
• 400,000 early-arriving yearlings raised at CJDH reared 6 months in pond released at 10 fpp in April
Omak Pond
Okanogan RM 32
• 400,000 later-arriving yearlings, raised at CJDH reared 6 months in pond released at 10 fpp in April
• 300,000 later-arriving subyearlings raised at CJDH reared for 2 months in pond released at 50 fpp in June
Chief Joseph Dam Fish Hatchery
• 200,000 early-arriving subyearlings, released at 40 fpp in June
• 300,000 early-arriving yearlings, released at 10 fpp in April
• 200,000 later-arriving subyearlings, released at 40 fpp in June
• 200,000 later-arriving yearlings, released at 10 fpp in April
BRITISH COLUM
WASHINGTON
COLUMBIA
FERRY
STEVENS
LINCOLN
GRANT
L. Chelan
CHELAN
Banks L.
Roosevelt L.
Loon L.
Long L.
Medical L.
Spokane
SPOKANE
Sprague L.
Moses L.
Moses Lake
Rock L.
Approximate S
0
17
20
25
28
2
21
231
90
395

Program Overview - Goal

- Spring Chinook

  Integrated recovery program: reintroduce spring Chinook to historical habitats

  Isolated harvest program: restore stable Colville Tribes ceremonial and subsistence fishery and create recreational fishing opportunities

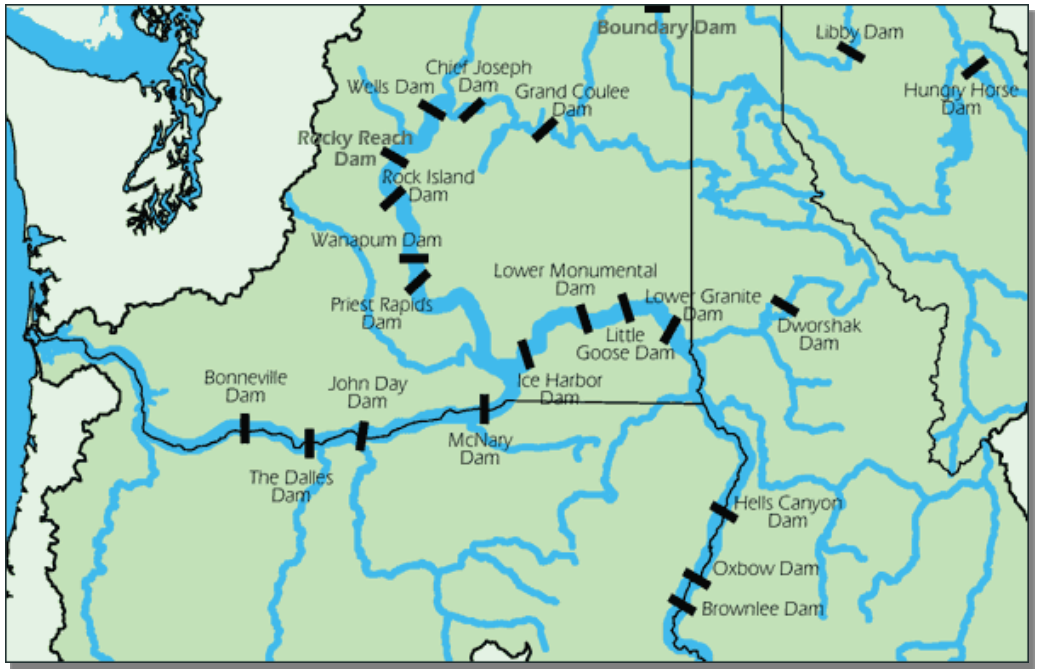
Program Overview - Spring Chinook Components

- Spring Chinook facilities designed to rear 900,000 yearlings
  - Release 650,000 at **Chief Joseph Hatchery**
  - Release 200,000 at **Ellisforde Pond**
  - Release 50,000 at **St. Mary's Mission Pond** on Omak Creek

- CJDH's 650,000 release would be **un-listed Carson** stock spring Chinook
- Okanogan releases would be **Carson stock** unless ESA-listed Methow Composite stock is initially available
- Switch all or part of program

Program Need

- Okanogan Chinook **must pass 9 dams** during juvenile and adult migrations
- Okanogan Chinook are subject to **ocean and lower Columbia River fisheries**
- Okanogan River **habitat is degraded***



** Substantial ongoing efforts and investment to protect and restore habitat in Okanogan River*

Step 2 Accomplishments

Step 2 Accomplishments

1. **Critical research –** successful completion brood behavior study, definitive results on FY 2006 brood collection study
2. **ISRP and Council -** completed responses to comments and concerns, completing final comments and analysis expect decision in March, April 2009
3. **NEPA -** Draft EIS completed May 2007; public review process completed June, 2007. Much local and agency support apparent; a few minor modifications, additions and cosmetic adjustments needed to render final EIS, pending USACE evaluation of NEPA Coop Agency status strategy with BPA. EIS targeted for completion in Spring 2009 with ROD coming shortly thereafter.
4. **ESA -** Concurrence from USFWS received. BiOp from NOAA Fisheries completed.
5. **M&E -** new draft plan will be developed, designed to be staged based on Council and ISRP direction
6. **Engineering -** preliminary engineering complete, value engineering completed
7. **Cost estimates -** have been refined and updated

(continued)

Step 2 Accomplishments

8. Development of conceptual cost share agreements
9. Completion of Step 2 document which includes:
   a) Project overview
   b) Responses to Step 1 ISRP and Council comments and questions
   c) Overview Step 2 activities
   d) Status and summary of critical research
   e) Status and summary of environmental compliance
   f) Engineering and design (35-50%)
   g) Status of land acquisition and leases
   h) Revised monitoring and evaluation plan
   i) Updated cost estimates (capital, operational by species)
   j) Discussion of conceptual cost sharing agreements
   k) Report on value engineering results

Step 2 - Activities

- Project Management, Coordination
  - Integrated process
  - Scope, schedule, cost management
  - Communications, information management
  - Contracting

(Contractors, CCT Staff, BPA)

Step 2 - Activities

Figure 1: Summer/ Fall & Spring Chinook Programs, General Timelines / DRAFT

Program Area	*Occurrence*	*FY 2003*	*FY 2004*	*FY 2005*	*FY 2006*	*FY 2007*	*FY 2008*	*FY 2009*	*FY 2010*	*FY 2011*	*FY 2012*	*FY 2013*
Planning and Design Step 1	One Time	■	■									
Planning and Design Step 2 (Preliminary Design, Other)	One Time			■	■	■						
Environmental Compliance Step 2 (Permitting, EIS, Other)	One Time			■	■	■	■					
Planning and Design Step 3 (Final Design)	One Time							■				
Brood Research Plan to Access Behavior	One Time			■	■							
Broodstock Testing Collection Plan	One Time				■	■						
Construction	One Time								■	■		
Capital Equipment Purchases	One Time									■		
Annual Operations and Maintenance	Annual									■	■	■
Monitoring and Evaluation	Annual									■	■	■

Cost Sharing Progress

- **Chelan and Grant PUD** - completing conceptual agreement for 35% of total production
- **Douglas PUD** – recent discussions to participate in CJHP cost sharing
- additional cost sharing (e.g., irrigation district)

Critical Research – Radio Telemetry Study

Study objectives:

- Confirm CJHP summer/fall Chinook broodstock protocols - relationship between time of arrival at Wells Dam and location and timing of spawning
- Evaluate migration routes and holding areas for use in live-capture, selective gear study
- Confirm suitability of fishway entrance to Chief Joseph Hatchery

Critical Research – Radio Telemetry Study

- Field work was conducted **July through November 2005**
- **Colville Tribes and WDFW** cooperated on study

- Tagged 292 fish at Wells Dam and released them just above the dam at Star Boat Launch
- Heard 95% of them at fixed and mobile listening stations
- Final fish locations were Okanogan, mainstem Columbia, and Methow Rivers (most to fewest fish)

Critical Research – Live-capture, Selective Gear

Study objectives:

- Evaluate CPUE of Chinook with various gears for broodstock collection
- Evaluate survival and stress to fish captured in various gears
- Evaluate cost-effectiveness, safety, operational features of various gears
- Evaluate capability to transfer captured fish to nearby hatchery

Study was a **cooperative effort** of the Colville Tribes and WDFW

- Study design **finalized** in 2005-2006
- Work completed **2006 and 2007**
- Study looked at:
  - Tangle nets
  - Fish Trap
  - Beach seine

Design and Engineering

- **Program verification**
  - Final biocriteria
  - Size functional requirements
- **Basis of design report**
  - Survey, aerials, maps, soils, well tests, technical reports, river intakes, utilities, etc.
  - Design criteria summary
- **Preliminary design documents**
  - 100+ drawings by discipline
  - Outline specifications

Environmental Compliance

- Biological Assessment
- Permitting plan and permit acquisition
- Cultural Resources
- HGMPs and NOAA consultation / Complete
- Environmental Impact Statement / Complete ROD expected in Summer 2009

Land Acquisition / Conservation Easements

- Secure properties for **acclimation ponds**
- Coordinate with COE on **lease for hatchery site** at Chief Joseph Dam
- Coordinate with irrigation districts on **acclimation pond lease** agreements

- Chief Joseph Hatchery Program **is** included as **Proposed Action** to assist in avoiding jeopardy and achieving recovery for UCR spring Chinook

Next Steps

1. Council, approval to proceed with **Step 3 Final Design** expected in March, April 2009
2. **Final design, Step 3** expected to be completed in late summer 2009
3. A **contractor was procured at completion Step 2** and will be involved in a design/ build process, allowing construction can proceed immediately upon approval of **Step 3**
4. **Construction** is likely to proceed in 2010 with completion in 2011, 2012
5. Planning for **future operations** has been initiated
6. Efforts to **secure and formalize cost sharing** are continuing


Thank You
BONNEVILLE
POWER ADMINISTRATION