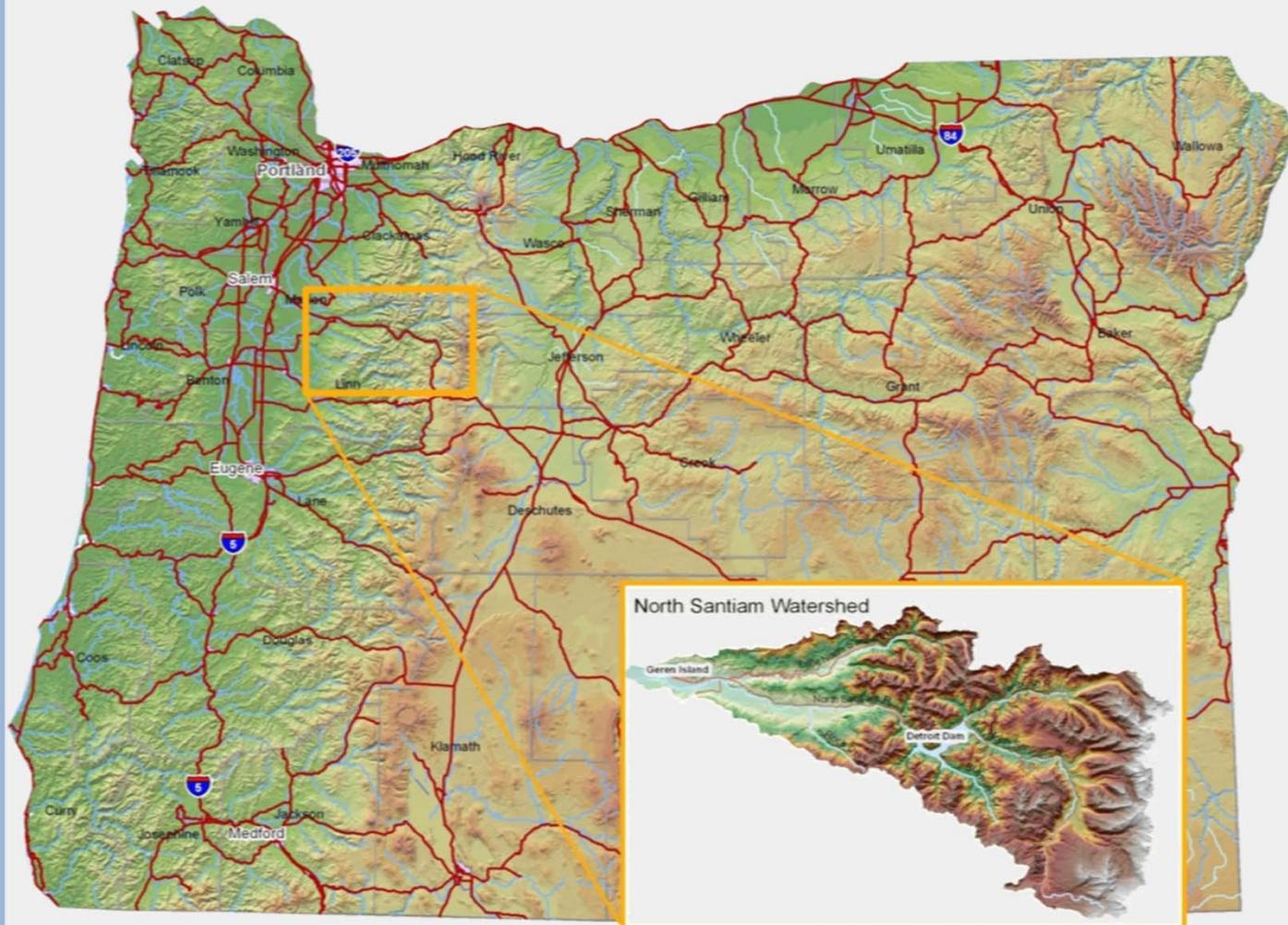


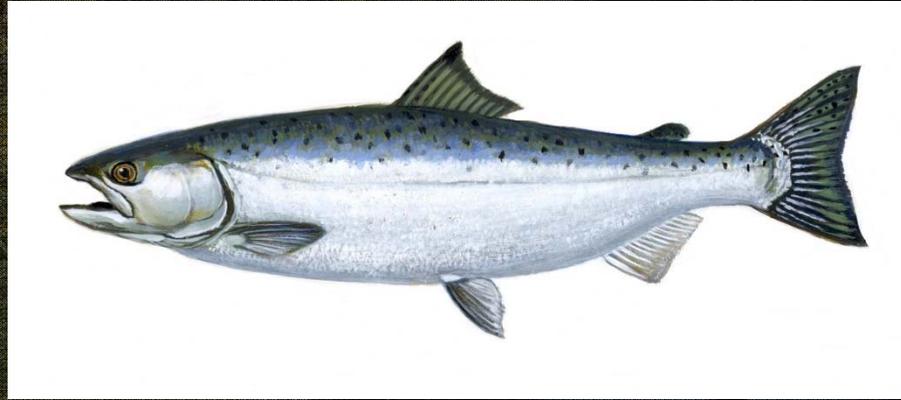
**Federal Mitigation Requirements  
Attached to Permits for Work In, Over,  
or Under Navigable Waters of the United  
States**

**H. JASON PULLEY  
CITY OF SALEM, OR**

# North Santiam River Watershed



# Threatened Species in the NSR



**Upper Willamette River Chinook**

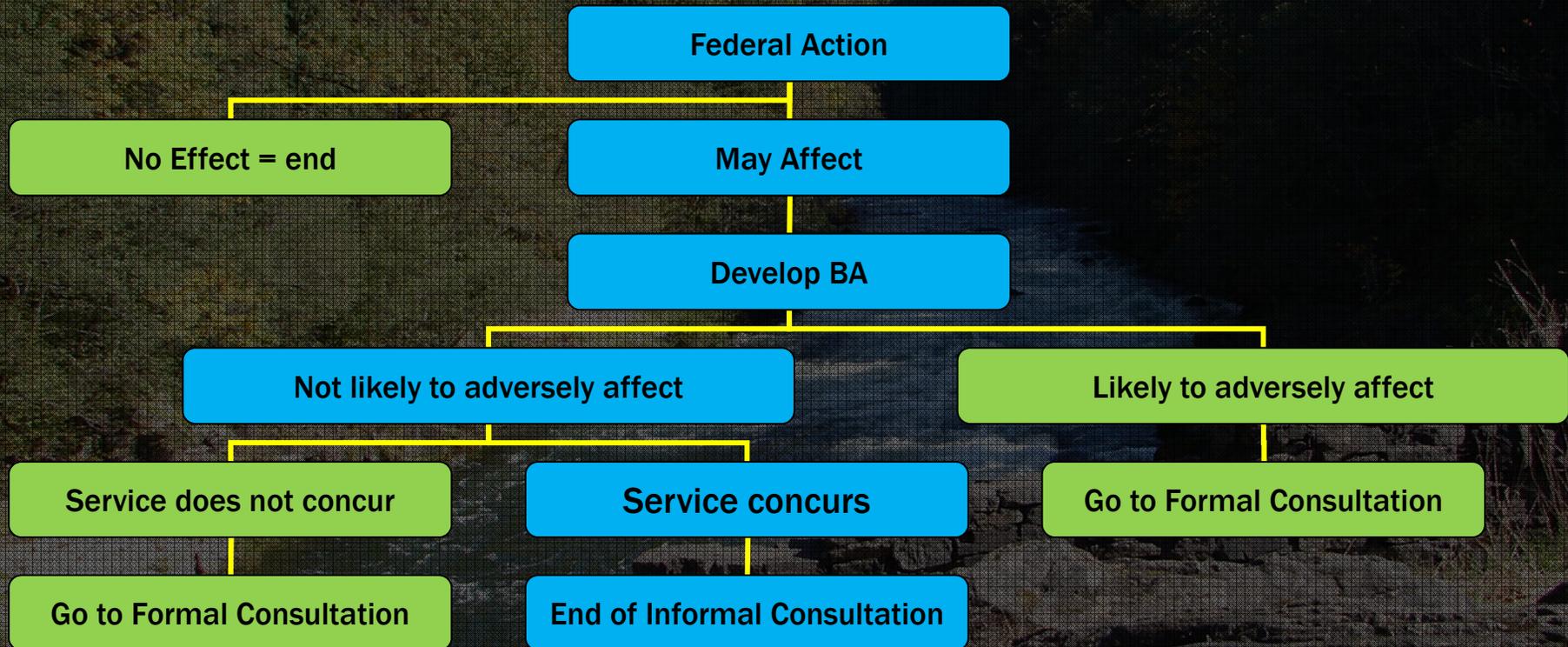


**Upper Willamette River Steelhead**

# Federal Consultation (Section 7)

- Section 7 requires a federal action agency to ensure that any action it
  - “authorizes,” “funds” or “carries out” and
  - that “may affect” listed species
- Is not likely to
  - jeopardize listed species by appreciably reducing the likelihood it will survive & recover in the wild
  - adversely destroy or modify critical habitat
- Actions that may require section 7 consultation include:
  - federal contracts, permits, licenses, authorizations, leases, or funding

# Federal Consultation (Section 7)



# “No Jeopardy” BiOp

- Allows the action to move forward
- Includes “Reasonable & Prudent Measures”
- “Terms & Conditions” implement the RPMs
  - Cannot change the scope, duration, timing, location
  - Cannot result in more than a “minor” change
- Authorizes Incidental Take

# “Jeopardy” BiOp

- Action agency cannot move forward with action as is
- Service can propose “Reasonable and Prudent Alternative” (RPA)
- RPA must be reasonable, feasible
- RPA can require more than minor changes
- If no RPA, action cannot move forward

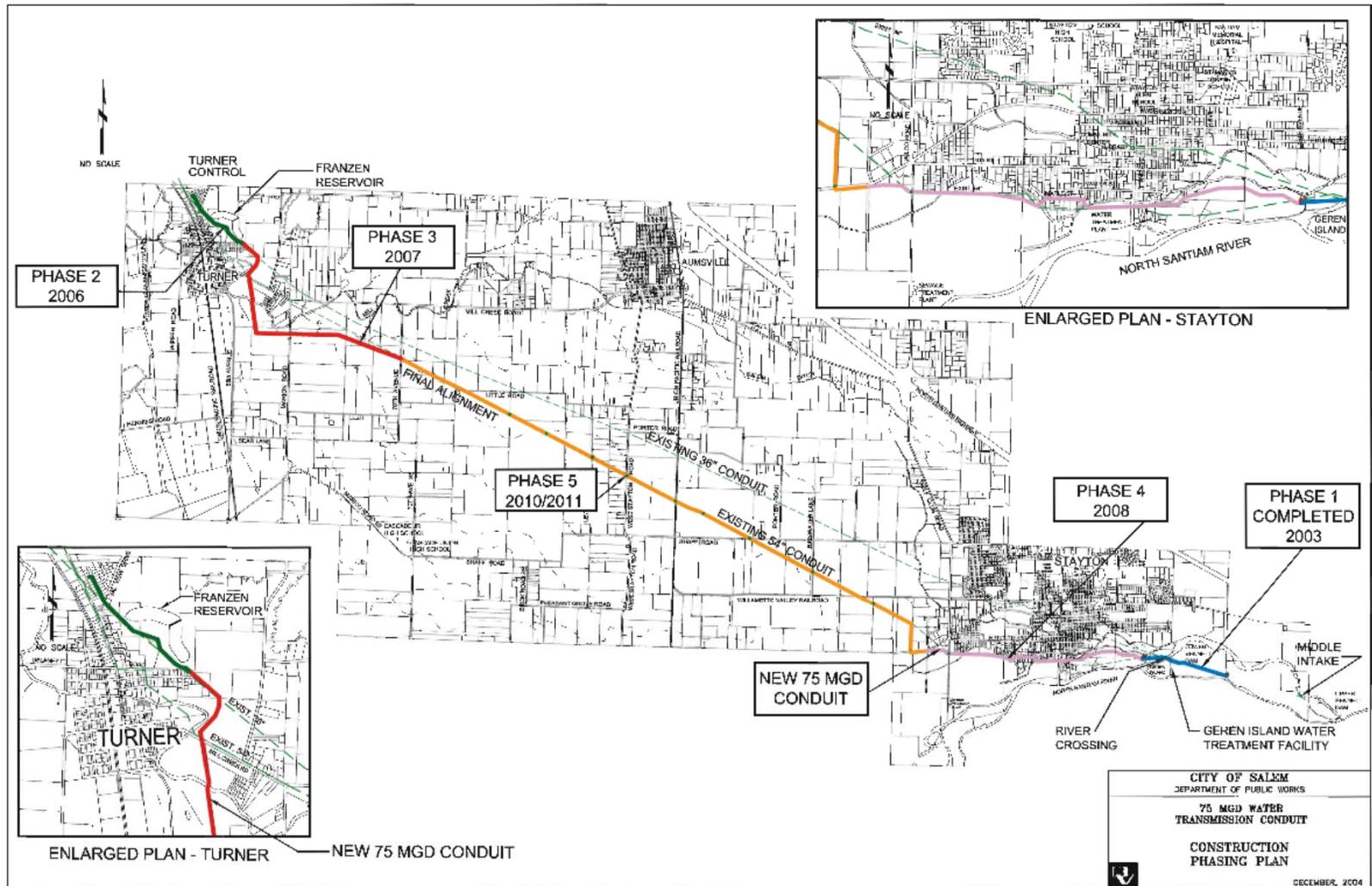
# 75 MGD Transmission Conduit

- Replace an existing 70+ year-old transmission line
- Capacity of 16 MGD (25 cfs)
- Resulting transmission of approximately 125 MGD (193 cfs)
- Phased approach to allow time for permitting and budgeting

# 75 MGD Transmission Conduit

- Phase 1: Geren Island river crossing
- Phase 2: Franzen Reservoir to Turner Control
- Phase 3: Franzen Reservoir to 70<sup>th</sup> Ave (Turner)
- Phase 4: Through Stayton
- Phase 5: Stayton to Turner
- Total Cost: \$74 M (2006 \$\$)

# 75 MGD Transmission Conduit



# 75 MGD Transmission Conduit

- Phase 1 – 3 completed
  - 404 Permits issued for Phase 1 & 3
  - Determination of *no affect* on listed species
- Phase 4 & 5 require a 404 Permit
  - Increased transmissions = increased withdrawals
  - Action *may affect* listed species
  - Section 7 Consultation triggered

# 75 MGD Transmission Conduit



# BA/BiOp Development

- **2002**
  - Water Withdrawal HCP Section 10 consultation was dropped
  - Water Withdrawal became a section 7 consultation in association with the 404 permit application based on:
    - A promise made by the City to USACE/NMFS when the 69” pipelines crossed the North Santiam River, and
    - NOAA advised Section 7 consultation would be easier than a Section 10
- **2003**
  - The parties acknowledged there was no agreeable scientific method to analyze habitat for fish and as such would enter into a negotiation in which:
    - The City would produce a Biological Assessment based on joint agreement between themselves and NMFS, in turn
    - NMFS would turn around the BiOp based on the BA with “minor tweaks”
- **2004**
  - City, HDR & NMFS met periodically to discuss potential terms & conditions
- **2005**
  - The City Engaged Preston Gates Ellis (now K&L Gates)
  - HDR, K&L Gates, and the City produced the BA
- **2006**
  - January - City made application for the pipeline construction to USACE with the 404 Construction Permit and BA
  - The City, NOAA, USACE & K&L Gates meet to discuss the production of the BiOp early 06
  - Communication was cut by NOAA with the City about spring time
  - The City met with the USACE to discuss separating Phase 3 of the pipeline construction from 4 and 5; the USACE issued a construction permit for Phase 3, Dec 06
- **2007**
  - Phase 3 constructed
- **2008**
  - NMFS issued USACE a partial Draft BiOp

# Draft BiOp

- BiOp made a “jeopardy” determination
- RPA #1
  - Water transmission restricted if gage measurements do not exceed 2,613 cfs at Mehama
  - Restrictions between June 15 & Sept 15
- RPA #2
  - Water transmissions will not be restricted if gage measurements do not exceed 2,613 cfs
  - City must provide “bucket for bucket” replacement at or above the intake equivalent to the flow depletion

# Draft BiOp

Percent Exceedence Flows		
Month	80% Flow (cfs)	95 % Flow (cfs)
May	2,100	1,491
June	1,435	1,124
July	1,100	999
August	1,000	909
September	1,300	1,040
October	2,115	1,839

# Draft BiOp: Issues

- Draft BiOp contains limits and restrictions that are much different from those proposed by the City in the BA.  
NMFS **confirmed** that it intended to use cfs units for baseline and curtailment limits
- Draft BiOp requests City and USACE to select between two RPAs.
- City cannot comply with either RPA unless replacement water sources are found to fully offset any increased transmission.
- Draft BiOp is not complete. NMFS could add additional restrictions in subsequent version.
- Terms of Draft BiOp may create legal exposure for current operations (even before Phases 4 and 5 constructed).
- USACE will not issue pipeline permit until the BiOp is finalized and an Incidental Take Statement (“ITS”) is issued by NMFS. City will be bound by the terms and conditions in the ITS.

# Draft BiOp

## Critical Elements of BA vs BiOp

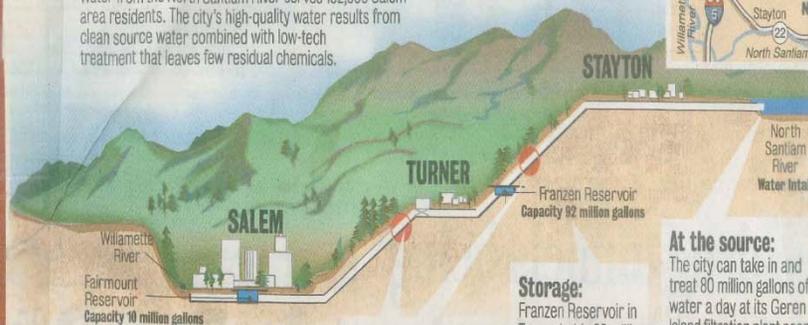
	City of Salem's BA	NMFS's BiOp Reasonable and Prudent Alternatives (RPA)			
Exceedance %	95-80% Approx 900-1200 cfs	2613 cfs			
Period Applies	June, July, Aug	June 15-30th	July 1-31st	Aug 1-31st	Sept 1-15th
Baseline Flow	66 mgd	73 cfs (47mgd)	82 cfs (53mgd)	76 cfs (49 mgd)	68 cfs (44mgd)
Curtailment Replacement	8-33% Tapered scale prop. to river and withdrawal flows	100% bucket for bucket			
Jeopardy	No	Yes, unless RPAs are applied			

# Draft BiOp

## City water use scrutinized

### How Salem gets its water

Water from the North Santiam River serves 182,000 Salem area residents. The city's high-quality water results from clean source water combined with low-tech treatment that leaves few residual chemicals.



### Consumption:

Growth has increased Salem's thirst for water. Average consumption is 30 million gallons per day and can rise to more than 50 million gallons per day in the summer.

### Delivery:

Water flows into the city through two large pipes which limit daily supply to 66 million gallons a day. The older 36" pipe built in 1936 is being replaced.

### Storage:

Franzen Reservoir in Turner holds 92 million gallons in reserve. An underground aquifer in Salem stores an additional 450 million gallons.

### At the source:

The city can take in and treat 80 million gallons of water a day at its Geren Island filtration plant near Stayton.

Statesman Journal

Salem pipeline project likely to hurt salmon, steelhead in Upper Willamette, report says

By MICHAEL ROSE  
Statesman Journal

Salem has boasted about its high-quality and abundant water supply but a National Marine Fisheries Service report suggests that the city's water consumption poses a threat to Upper Willamette River Chinook salmon and steelhead.

Protecting the fish has complicated

**'It's something the city really has to pay attention to.'**

Bob Cannon, Salem city councilor



StatesmanJournal.com

Statesman Journal  
SERVING SALEM, KEIZER  
AND THE N

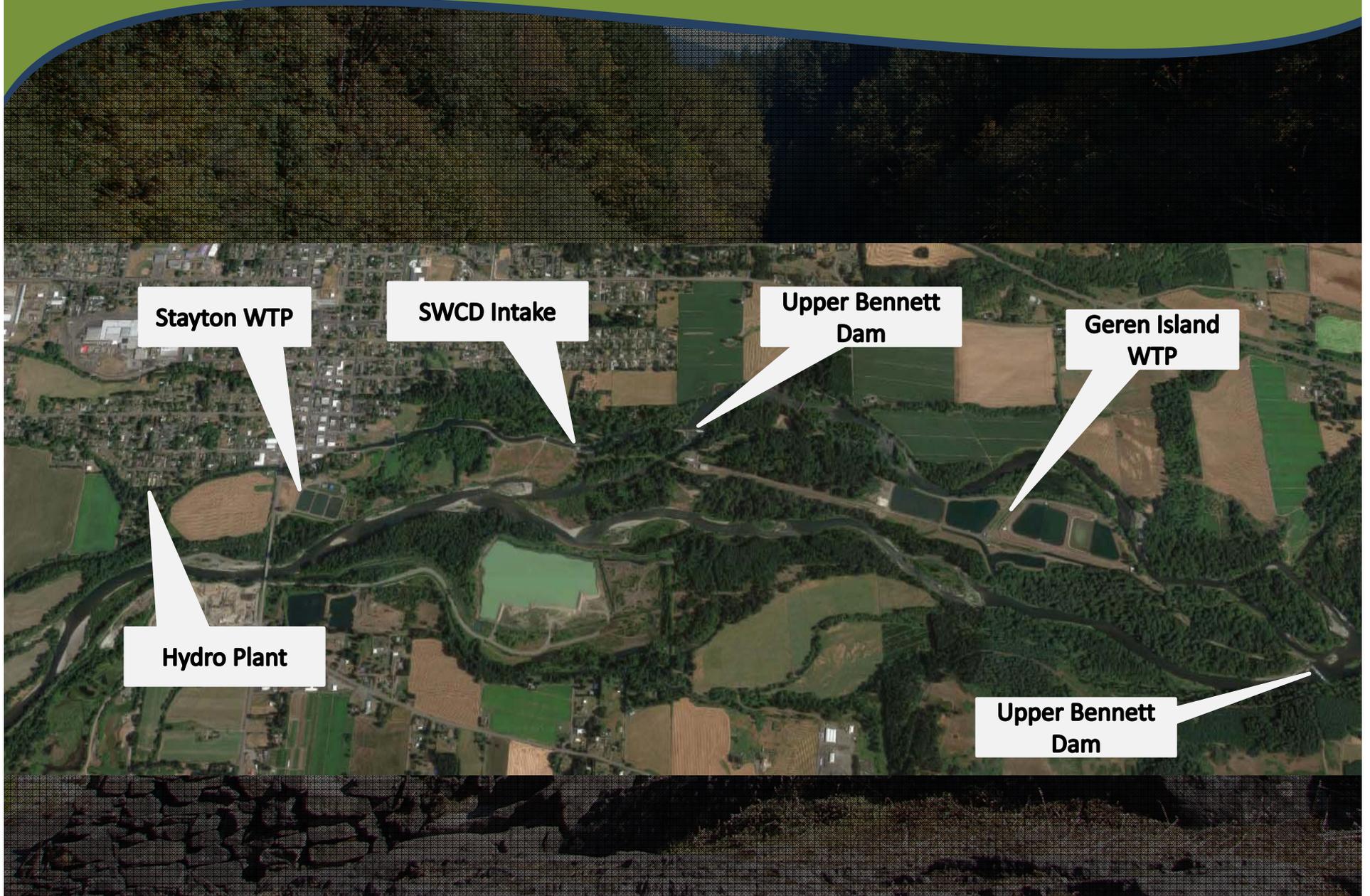
# 75 MGD Transmission Conduit

- **Formally withdrew permit application**
  - Demand forecast no longer showed need for the project
  - Recession affected available funding
  - The City did not want the Draft BiOp to become final
- **RPAs are still a consideration on any future permitted project**

# Stayton Project (FERC P-12574)

- In operation 1937 – 1992
- 600 kW turbine
- Purchased by SWCD in 1996
  - Attempted to license under in-conduit exemption
  - DENIED
  - Amended to 5-MW exemption
- Diversions up to 1050 cfs (762 cfs for power)

# Geren Island Complex



Stayton WTP

SWCD Intake

Upper Bennett Dam

Geren Island WTP

Hydro Plant

Upper Bennett Dam

# Stayton Project (FERC P-12574)

- Water diverted at Lower Bennett Dam to Stayton Ditch
- SWCD head gates and fish screen
- Excess water not diverted for irrigation returns to the river over a tailrace barrier
- Adult return channel (ARC) provides additional passage options

# SWCD Facilities



# Stayton Project (FERC P-12574)

- FERC permitting triggered consultation
- NMFS issued BiOp in 2007
- 19 mandatory conditions pursuant to Section 30(c) of the FPA
- Highlights:

# Stayton Project (FERC P-12574)

- **Seasonal operations and ramping**
  - No hydro diversions 4/15 – 9/30
  - 10/1 – 4/14 flows allowed only during exceedence of specific flow target (4,200 cfs @ Mehama)
- **Modify ARC for improved passage**
- **Construct fish ladder at Spill Dam**
- **Construct fish ladder at Lower Bennett Dam**
- **Biological monitoring**
- **Annual reporting**
- **Reservation to amend conditions**

# Stayton Project (FERC P-12574)

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Santiam Water Conservation District

Project No. 12574-002

NOTICE OF WITHDRAWAL OF APPLICATION FOR  
EXEMPTION FROM LICENSING

(March 2, 2011)

On February 10, 2011, Santiam Water Conservation District filed a notice of withdrawal of its June 18, 2007 application for a small hydropower exemption for its proposed Stayton Hydroelectric Project. No one filed a motion in opposition to the withdrawal, and the Commission took no action to disallow it. Accordingly, pursuant to Rule 216 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.216 (2010), the withdrawal of the pleading became effective fifteen days after it was filed.

Nathaniel J. Davis, Sr.,  
Deputy Secretary.



**Thank you**

CITY OF *Salem*  
AT YOUR SERVICE