

Hydraulic Code Implementation Citizen Advisory Group (HCICAG)

Meeting Notes

These meeting notes are intended to convey highlights from the meeting, including information and perspectives shared and discussed. Decisions made during the meeting are included. This document is not a word-for-word transcription of the meeting. We have tried to capture the main topics and issues discussed and highlight some of the main questions, comments and action items raised by group members during the meeting.

HCICAG Members: Please verify and correct any comments attributed to you so that we can accurately capture the issues or points made during the meeting.

Meeting Date/Time:

October 1, 2015
10:00 - 3:00 p.m.

Location:

Legislative (Capitol) Building, Columbia Room, 416 Sid Snyder Avenue, Olympia, WA

Attendees

| Name | Affiliation |
|--|---|
| HCICAG Members | |
| Shannon Moore | Moore Fish Company (Commercial Fishers) |
| Bill Rehe | Port of Tacoma |
| Jim Shellooe | Association of General Contractors of Washington |
| Steve Whitehouse | Building Industry Association of Washington |
| Lisa Willis | Port of Longview |
| Heather Trim | Futurewise |
| Amy Carey | Sound Action |
| Kim MacDonald | Fish not Gold |
| Tina Whitman (alternate for Kimbal Sundberg) | Lead Entities, San Juan County (WRIA 2) Lead Entity |
| Stephen Dillon | Hancock Forest Management, Inc. |
| | |
| Public and Interested Parties | |
| none | |
| | |
| WDFW Staff | |
| Randi Thurston | Protection Division Manager, Habitat Program |
| Dan Doty | Environmental Planner, Habitat Program |
| Kelly Aaron | Customer Service Specialist, Habitat Program |
| Tim Quinn | Chief Research Scientist, Habitat Program |

October 1, 2015 HCICAG Meeting Notes

Notes: Draft meeting notes were sent out to the group by Dan Doty on 10/15/15. This revised draft incorporates edits/comments received via email from Lisa Willis (10/15/15), Shannon Moore (10/16/15) and Steve Whitehouse (10/19/15). The notes were accepted at the April 20, 2016 meeting.

| | |
|----------------|--|
| Phil Dionne | Research Scientist, Habitat Program |
| George Wilhere | Research Scientist, Habitat Program |
| Pat Chapman | Environmental Planner, Habitat Program |
| Jane Atha | Research Scientist, Habitat Program |
| | |

Welcome, Introductions and Agenda Review

Randi Thurston welcomed everyone and reviewed the agenda after everyone introduced themselves.

Old Business

Approval of Meeting Notes: Randi reviewed the draft meeting notes from the July 7, 2015 meeting and asked if there were any comments or changes. There were none and the meeting notes were approved as written.

Discussion about the proposed forage fish (surf smelt) spawning occupancy standard and permitting guidance for biologists

Randi Thurston and Tim Quinn led the discussion. Tim gave a presentation and reviewed the science/study that served as the basis for the proposed guidance. Randi discussed the outreach effort and stakeholder feedback and the policy implications of the proposed guidance. This prompted a lot of questions, comments and discussion by the group. In general, the group did not feel that the guidance document was ready to be implemented as guidance for the biologists. The comments and concerns ranged widely and are noted below. There was, however, general agreement among most of the HCICAG members that it may be acceptable to consider the guidance as informal/interim guidance pending more discussion and a resolution of outstanding issues. HCICAG member's response to the question "Should WDFW use the current draft as interim, informal guidance?" is summarized below.

Committee Questions/Comments:

General Issues on Proposed Guidance

- The Statute requires incorporation of the new science and WDFW should incorporate it.
- Based on this science, the yellow "adjacent" zones should be considered as "documented" spawning habitats.
- Concern that all effected stakeholders were not engaged in outreach discussions and webinar held by WDFW.
 - Increase Transparency
- More studies are needed. Concerns about expanding Camano results to other areas of Puget Sound.
 - Concerns about applicability to forage fish spawning along outer coast and Columbia River.
 - Concerns about the old survey data
- Mine existing data and use information provided by other groups such as Friends of San Juan's
- Good with the guidance as drafted. Encourage department to test model and conducted more studies to determine if the Camano study is applicable to other Marine areas.

- Camano study is a good start. Need studies in other areas.
- Grandfather clauses should be included for work involving pre-existing structures.
- Support the guidance as drafted. Need to integrate better between the science and policy/permit groups within the program.
- Recommend using this guidance in interim.
- It seems that the real value of this tool is to promote discussions between the project applicants and the biologists during the permit review process.
- Concerns about requiring a single sample in the yellow zone just before the project starts.
 - Not enough sampling effort > recommend requiring more sampling in yellow zone
- Concerns about the GIS mapping and how the yellow zone information will be conveyed to local land use planners and permit applicants in a way that will not be confusing.
 - Beware of complexity of GIS maps
 - Red and yellow zones on GIS maps confusing... make it all red “documented”
- Applicants should have opportunity to refute conditions.
 - Maps may show that spawning is there but the local site conditions may indicate that no suitable habitat is present.
 - Site specific conditions need to be considered when conditioning and issuing permits. Sometimes the project site may not have suitable habitat when the GIS database may indicate the area as a spawning beach.
- General concerns by many in the group about the guidance needing to be tweaked before it can be approved as guidance. Consider it informal and interim for now.
- Concerns raised about due process and legal risks of using informal or interim guidance
 - Recommend a legal review.
- Several in the group raised issue of qualification of surveyors (biologists and consultants)
 - Proper Training and Certification of surveyors.
 - Need safeguards to ensure quality...overzealous biologists or consultants not doing enough.
 - How do we identify the “good” contractors
 - Oversight of surveyors?

Technical Issues on Draft Guidance

- Should require surveys in potential habitats as well.
- Various suggested edits on the document.
 - #2 Change “should” to “must” (Lisa Willis 10/15/15 comments)
 - #2b change from “expected” to “must” (Lisa Willis, 10/15/15 comments)
 - Remove #3 or clarify that the intent of this section is to encourage staff to conduct surveys of unmapped areas when **not associated** with a project or application. (Lisa Willis, 10/15/15 comments)
 - Change wording in Section 3.a: *“If the beach exhibits suitable habitat for forage fish spawning, habitat biologists must conduct an intertidal forage fish spawning beach survey before work is conducted. All beaches with suitable habitat and sediment materials should be considered as potential spawning habitat”.* (Shannon Moore 10/16/15 comments)
- How do work windows overlap with other species and affect project implementation

- Defined spawning tidal heights/zones should reflect regional tidal references.
- Adjacent areas should be considered as occupied /documented spawning areas to reduce confusion.
- Kudos to the department for this effort. Encourage more studies.

Question to the HCICAG: Should WDFW use the current Draft as Interim, Informal Guidance?

- **Amy Carey** –Yes, for informal/interim guidance...it seems like it is already being implemented by Bios. The guidance as drafted not acceptable as is. Lots of issues to iron out before it is acceptable.
- **Kim McDonald** – Yes, to informal/ interim guidance. It is not ready to be adopted as formal guidance.
- **Shannon Moore** – Yes, to Informal /Interim Guidance and is good with the document as it is written.
- **Bill Rehe** – Yes, to Informal /Interim Guidance
- **Lisa Willis** – NO, for Informal /Interim Guidance. Need to update/change language in document and finalize before use. (Note: Revised based on comments received by Lisa Willis on 10/15/15)
- **Stephan Dillon** – Yes, only as internal informal /Interim Guidance. Need additional studies before it should be adopted as formal guidance.
- **Tina Whitman** – Yes, as informal/interim guidance.
- **Heather Trim** – Yes, as informal/interim guidance
- **Steve Whitehouse** – NO. Concerned about risks and legal issues if used as informal interim guide. *Steve recommends “that the draft not be adopted on an interim/informal basis, but rather, once it was tweaked, to be adopted on a formal, non-interim basis.” (Steve Whitehouse 10/19/15 comments)*

HPA Implementation and Effectiveness Monitoring - Part 2

George Wilhere and Phil Dionne, from Habitat Program/Science Division presented more detailed results of the HPA implementation and effectiveness monitoring program for culverts in fish-bearing streams and saltwater bank protection.

Committee Questions/Comments:

- Wants a standardized procedure on how to measure bank full width
- How are you going to train applicants to measure properly? Use the DOE training? Ecology has OHW mark training.
- Who is doing the training?
- DFW should be lead for training but coordinate with other agencies (wants all agencies to use the same measurements)
- Recommendation that all training and basis of measurements be standardized and available to the private sector.
- Biologists should conduct site visits and push this discussion during the pre-application process – ensure that the right measurements are being taken based on their standardized training
- How many bulkheads were removed/replaced?

October 1, 2015 HCICAG Meeting Notes

Revised Draft Version 2 - January 2016

Notes: Draft meeting notes were sent out to the group by Dan Doty on 10/15/15. This revised draft incorporates edits/comments received via email from Lisa Willis (10/15/15), Shannon Moore (10/16/15) and Steve Whitehouse (10/19/15).

- Do we have a permit template that includes the length of the bulkhead? (She wanted measurement data to be required either in the application or required by the Bio to make a complete application before the permit is issued)
- We see permits don't have in the plans, the tidal elevations. If you're looking at OHW, you need to verify it; elevations are needed
- Monitoring the effectiveness component is great – but is it working?
- What data do we need to do effective compliance in the future, like what's next?
- We would like the correlation about who prepared the application and who constructed the project (solely private party or private applicant with an agent?)
- Since people can apply and possibly do the work on their own, what's the percentage of the non-compliant projects constructed by landowner/ applicants (looking to find where the problem lies regarding bad measurements as private landowners are not as educated about these type of measurements, but agents should be held accountable)
One member expressed concerns *“that the problem may be in the level of expertise of an operator during construction or a significant change to design or materials during construction for cost savings which are often made by landowners and less often by engineers and contractors.”*
- Large scale – what is missing? Wants better guidance/training and more info on permit applications?

Drought response and emergency rules for HPAs

Pat Chapman, Regulatory Services Section Manager, presented an update on the drought response and emergency rules for HPAs.

Committee Questions/Comments:

- Is there a list of people who can sign up for HPA notices (Tina and Heather agree on almost 100% transparency, notices should go out to public – not just people in the regulatory industry)
 - Response -WDFW issued public news releases regarding emergency rules and closures and posted information on the Agency Website, including the drought response website (<http://wdfw.wa.gov/conservation/drought/>). DFW also posts notices on social media sites like Facebook and Twitter.
- Can we add a provision in the HPA or language that states that if Emergency conditions exist we can make x,y,z changes and they must be followed? (Pre-write an emergency rule in the HPA (blanket rule) so we don't have to issue emergency rules, etc.)
 - Response – Statue allows modification to the permit based on emergency issues, but we are required to talk to the applicant first, therefore we cannot put a blanket emergency rule in the HPA.
- Hoot Owl restrictions for fishermen required that they have everything removed from the water by 2pm. Concerned that suction dredges were not restoring sites prior to leaving the water.
- Why are they (miners) not required to fill in the holes created? Fish are being stranded
- We need regulatory fairness – fishermen were being responsible, but miners were not; double standard

- Response – We responded to these concerns and subsequently did require that dredgers fill holes prior to leaving sites
- Are we working on predicting next season’s drought?
 - Response - Administrative work coordinating with programs to get rules approved will be worked on. We are working with/talking with Regional staff.

Wrap-up

Next Meeting Date

The next meeting is scheduled for: **January 14, 2016**

Time: 1000-1500

Location: WDFW Directors Conference Room, Natural Resources Building, Olympia, WA

Possible Agenda Topics for the next meeting

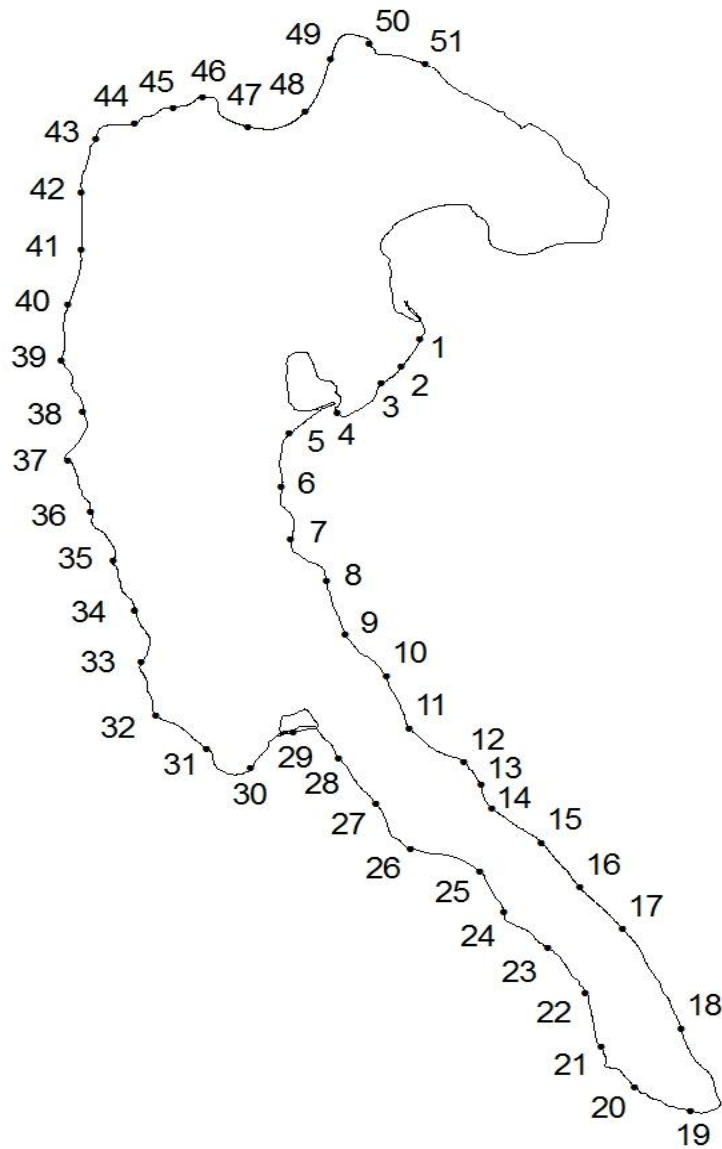
- Continue discussion and analyze the forage fish guidance alternatives using a structured decision making tool and provide a recommendation to WDFW management.
- Consider doing an HPA Case Study/Review of a “Typical Bulkhead Project” , including the provisions, plans.
- Bioengineered Marine Shoreline Protection Projects – Are they working?
- Consider a Panel Discussion to address permitting, coordination and continuity between various state agencies (DNR, WDFW, Ecology, others?)
- Can we look at the permit requirements for bulkhead work and specifically the placement of accumulated LWD on these projects?
- This summer, there was a large release of woody debris from bulkhead work at Pt. Williams on Samish Island. 20 permits were issued in this area, 4 of which were located on the Samish Bay side. Huge log debris rips moved into the gillnet fleet working downstream. I've been asked by the community of fishers to examine the special conditions that may need to be included in these permits.

Action Items:

- Meeting Notes: WDFW will compile and send out meeting notes to HCICAG.
- Presentations from today’s meeting will be posted on the HCICAG website.
- Send the Group the peer reviewed paper by Quinn et al 2012 Forage Fish Paper *“Patterns of Surf Smelt, Hypomesus pretiosus, Intertidal Spawning Habitat Use in Puget Sound, Washington State”*

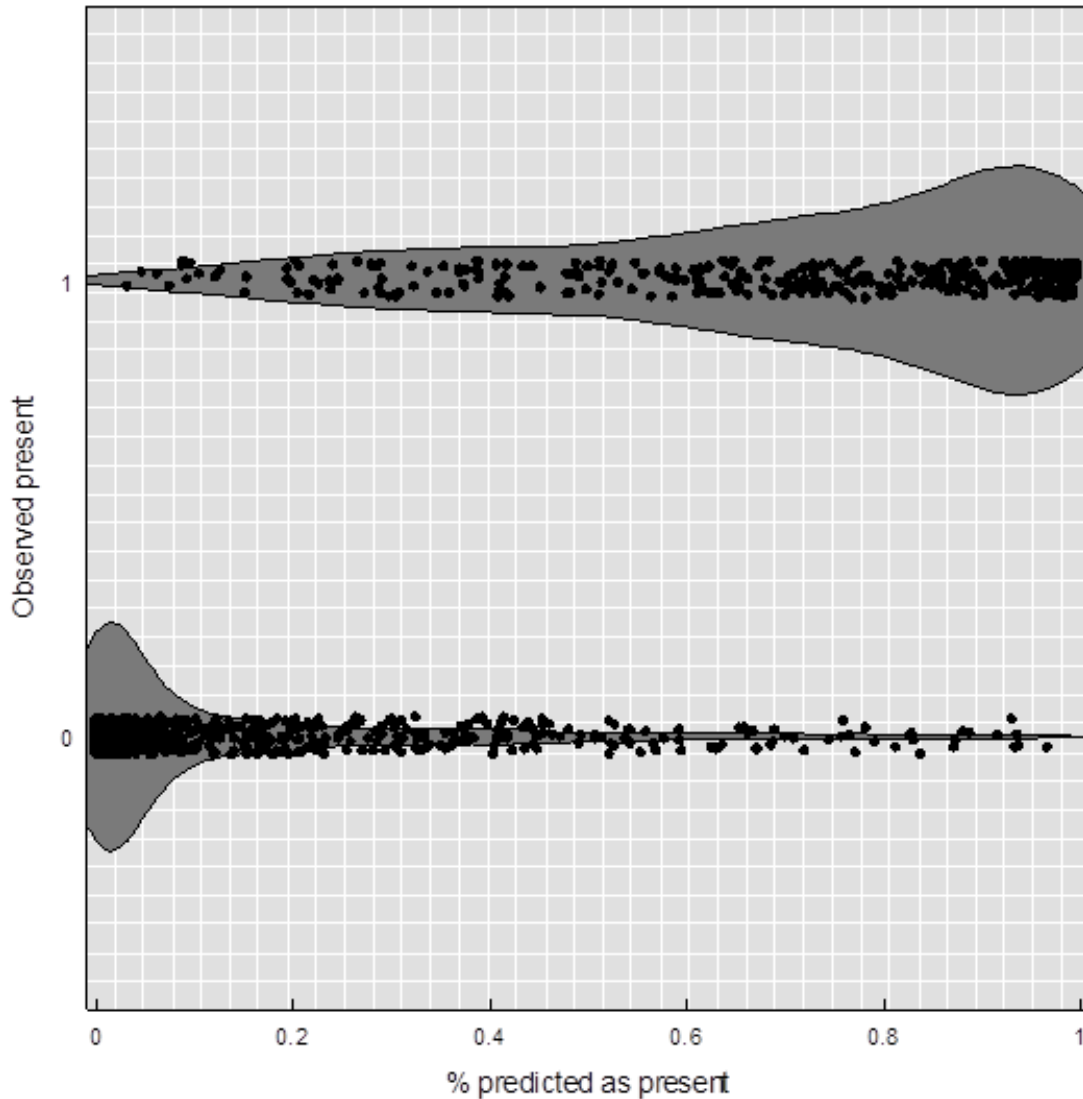
DEVELOPING GUIDANCE REGARDING HYDRAULIC
PROJECT APPROVAL (HPA) PROVISIONS FOR THE
PROTECTION OF INTERTIDAL FORAGE FISH
SPAWNING BEDS

A Science Overview



Camano Is Study:
sampled 52 sites
every two weeks
for 1 year

Timothy Quinn and others. 2012.. Patterns of Surf Smelt, *Hypomesus pretiosus*, Intertidal Spawning Habitat Use in Puget Sound, Washington State. *Estuaries and Coasts* 35:1214-1228



The model is
good, not
perfect

Figure 2 Posterior predictive check. A vector of 1200 random draws was generated from the posterior $[y^* \sim Ber(\hat{\theta} = \Pr(\theta | y)) \in \{0,1\}]$ for every point (site x time) in the data set and the proportion of successes (from 1200) plotted against the true value of Y_{it} .

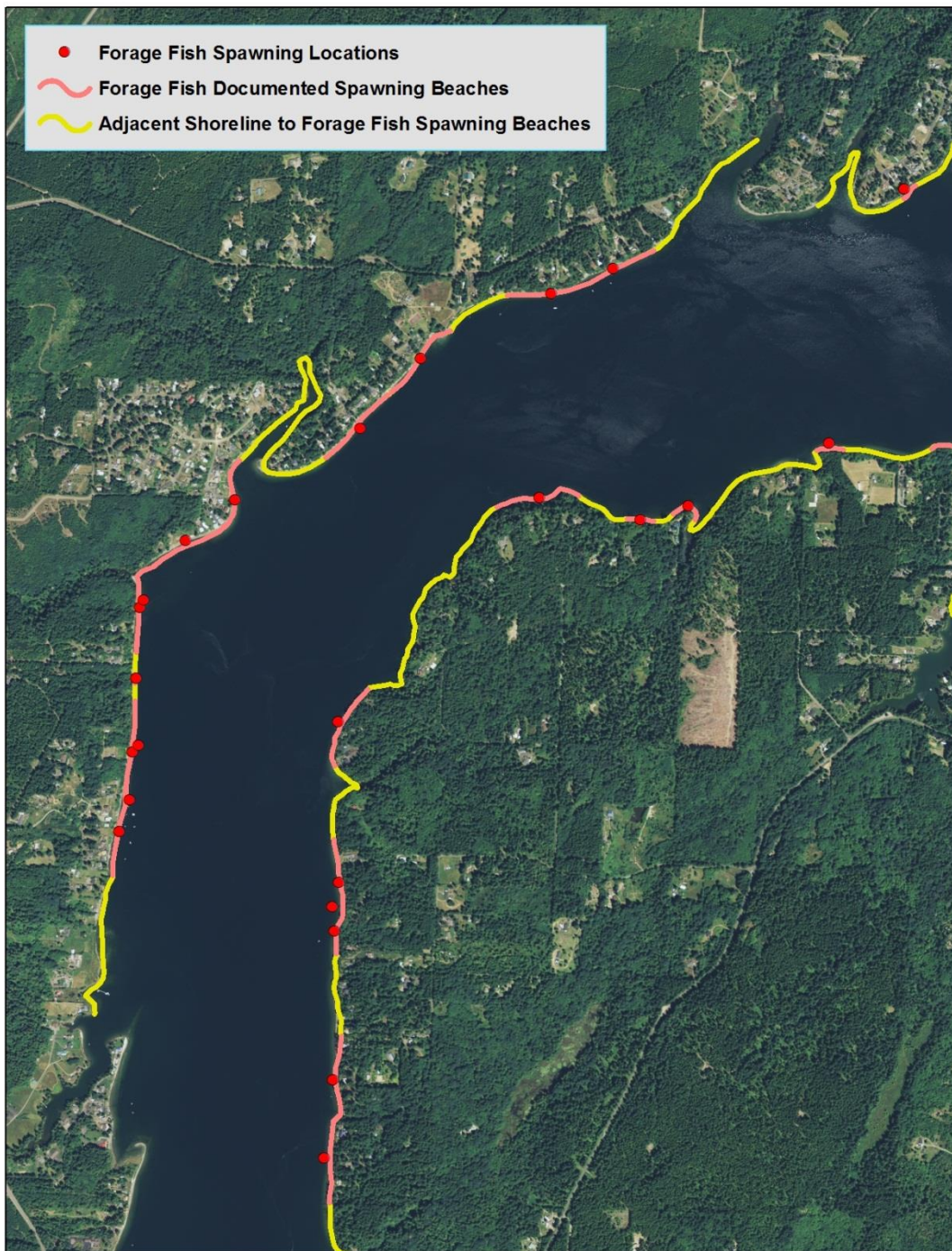
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Beach Sample Point

305 m

1268 m





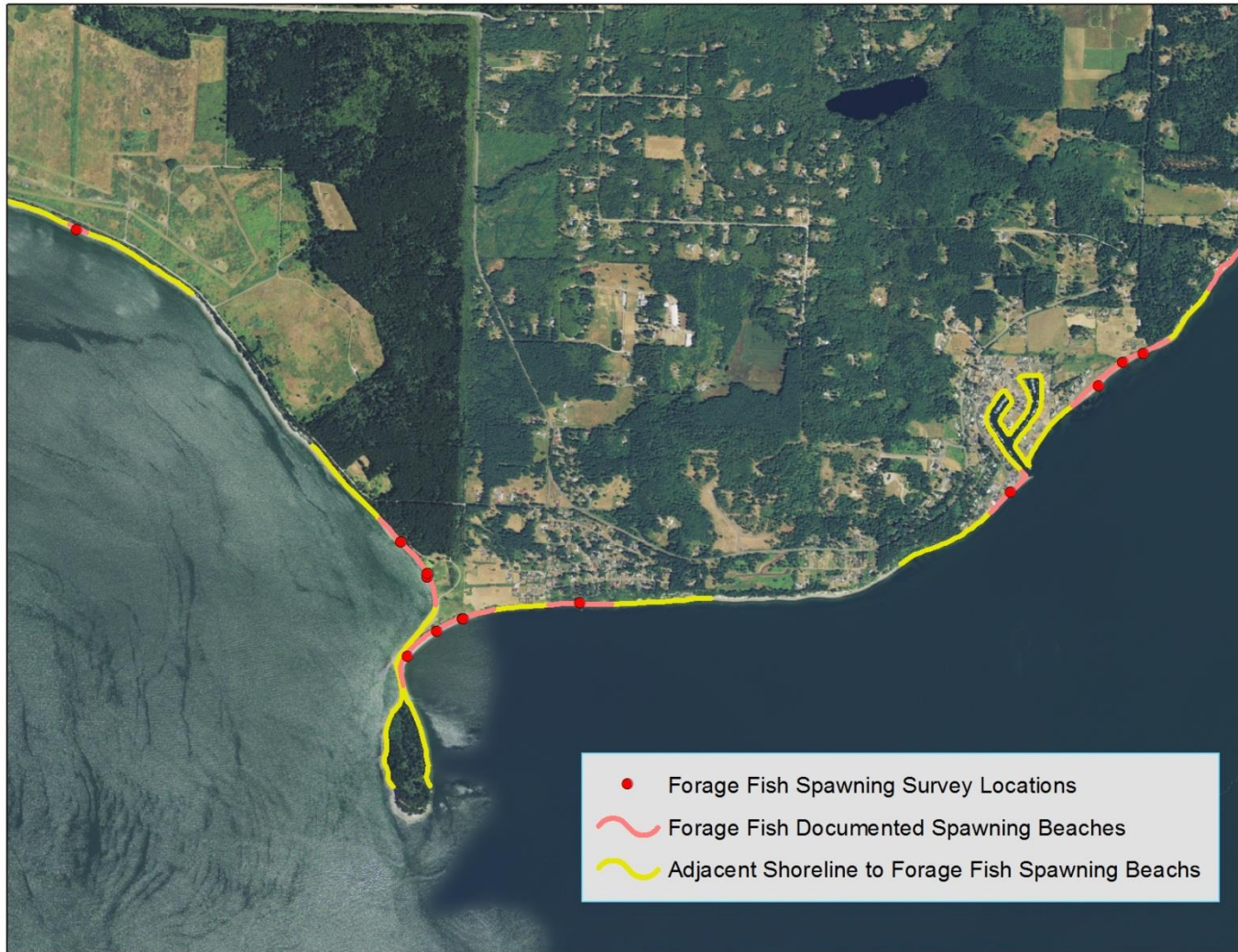
Mock-up of Forage Fish Spawning beaches (in red) by Adjacent Shorelines (in yellow)

Pickering Passage between Hartstene Island and the mainland (Mason Co)



Mock-up of Forage Fish Spawning beaches (in red) by Adjacent Shorelines (in yellow)

Agate Passage between Port Madison and Port Orchard (Kitsap Co)



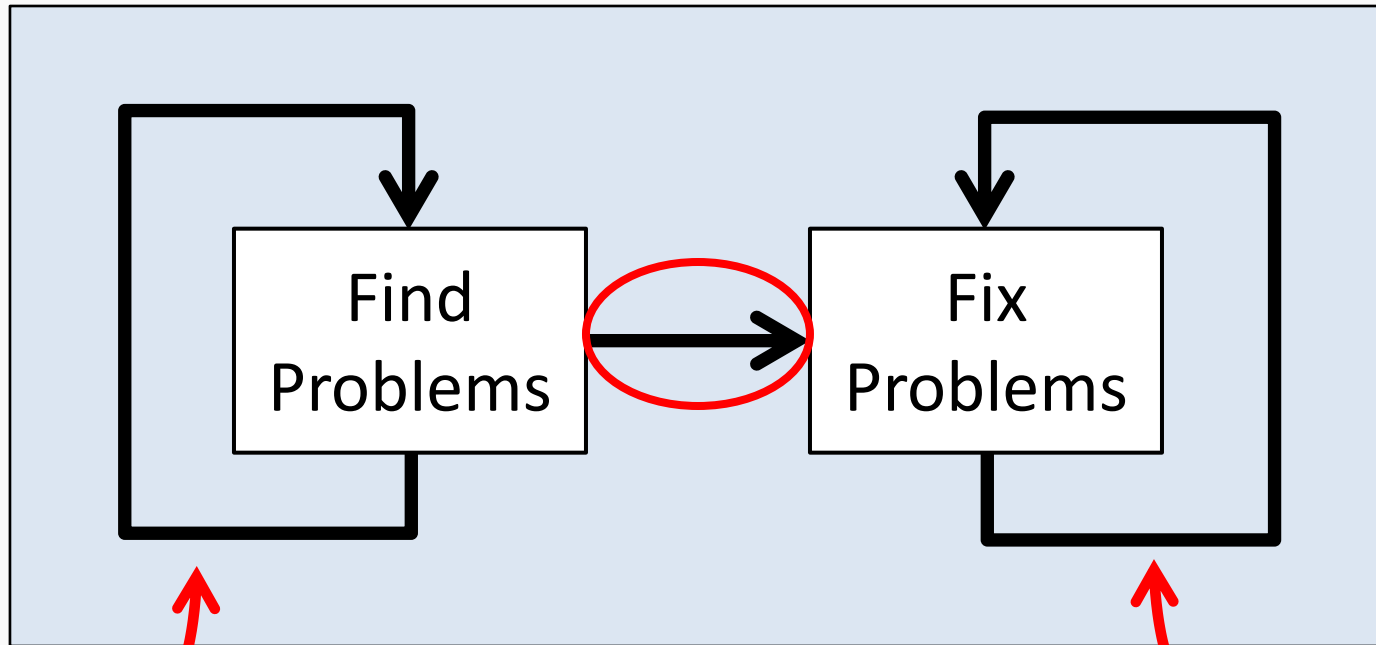
Mock-up of Forage Fish Spawning beaches (in red) by Adjacent Shorelines (in yellow)

Polnell Point in the Saratoga Passage (Island Co)

Year-One Progress Report on Hydraulic Project Implementation Monitoring



Adaptive Management



Monitoring

**Continual Process
Improvement**

Implementation Monitoring

Determines whether hydraulic projects were implemented properly.

Effectiveness Monitoring

Determines whether hydraulic projects result in the desired habitat conditions, especially over time.

Hydraulic Structures Monitored in 2013

Culverts

Marine Shoreline Armoring

Proper Implementation of What?

- Rules: No-slope Culvert
 - culvert width at streambed \geq bankfull width
 - culvert slope = 0 %
 - countersunk depth at outlet \geq 20% of culvert rise


Proper Implementation of What?

- Rules: No-slope Culvert

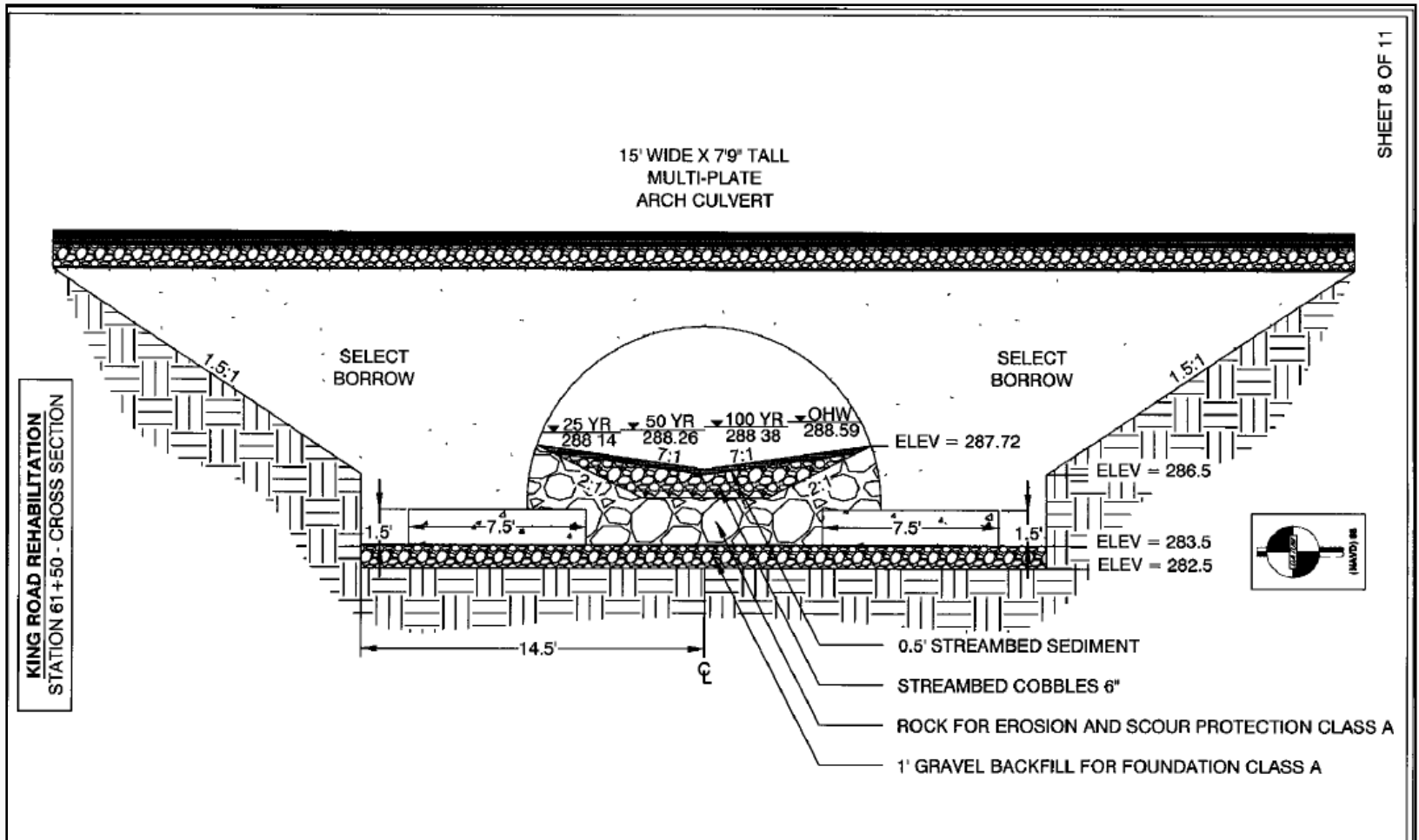
- culvert width at streambed \geq bankfull width
- culvert slope = 0 %
- countersunk depth at outlet \geq 20% of culvert rise

- Permit

- provisions
- refers to project plans

| | | | |
|--|---|---|------------------------------|
|  | HYDRAULIC PROJECT APPROVAL RCW 77.55.021 - See appeal process at end of HPA | Coastal 48 Devonshire Road Montesano, WA 98563 (360) 249-4628 | |
| Issue Date: October 14, 2013 | Control Number: 130222-2 | Project Expiration Date: September 30, 2014 | FPA/Public Notice #: 2416031 |
| <u>PERMITTEE</u> | | <u>AUTHORIZED AGENT OR CONTRACTOR</u> | |
| Glen Jorges 2020 Enetal Beach Road Bremerton, WA 98310 | | Mason County Conservation District ATTENTION: Gavin Glone 480 West Business Park Road Shelton, WA 98584 360-427-9436 Fax: 360-427-4396 | |
| Project Name: FFFPP Jorges Culvert Replacement | | | |
| Project Description: Remove an existing 30" concrete culvert and replace with 16' 4" x 5' 11" x 32 foot long pipe arch on a 2.3% grade using the simulated stream design to provide fish passage at this road crossing. | | | |
| <u>PROVISIONS</u> | | | |
| 1. The project may continue between October 14 and October 25, 2013, and July 1 and September 30, 2015. | | | |
| 2. Work shall be accomplished per plans and specifications received by the Washington Department of Fish and Wildlife (WDFW) on the Forest Practices Application No. 2416031 and additional site plans submitted to WDFW entitled JURGES FFFPP - ALUMINUM BOX CULVERT dated August 16, 2012, except as modified by this Hydraulic Project Approval. A copy of these plans shall be available on site during construction. | | | |
| 3. NOTIFICATION REQUIREMENT: The Habitat Biologist listed below shall receive written notification (E-mail or mail) from the person to whom this Hydraulic Project Approval (HPA) is issued (permittee) or the agent/contractor no less than three working days prior to the start of construction activities. The notification shall include the permittee's name, project location, starting date for work, and the control number for this HPA. | | | |
| 4. The culvert shall be installed and maintained to ensure unimpeded fish passage. | | | |
| 5. The culvert facility shall be maintained by the owner(s) per RCW 77.57.030 to ensure continued, unimpeded fish passage. If the structure becomes a hindrance to fish passage, the owner(s) shall be responsible for obtaining an Hydraulic Project Approval and providing prompt repair. Financial responsibility for maintenance and repairs shall be that of the owner(s). | | | |
| STREAM FLOW BY PASS | | | |
| 6. The existing culvert shall be removed and the new culvert installed in the dry or in isolation from the stream flow by the installation of a bypass flume or culvert, or by pumping the stream flow around the work area. Considering the expected duration of this project, WDFW recommends a passive, gravity by-pass system be utilized for this project. However, if pumping is selected for by- | | | |
| Page 1 of 6 | | | |

“Work shall conform to plans and specifications received by the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval.”



Implementation Monitoring

4 Key Questions

- 1) Did the permittor issue a complete permit, that is, one that contains provisions and/or project plans for all critical structural dimensions?
- 2) Is the permittor's permit consistent with hydraulic code rules or design guidelines?
- 3) Did the permittee comply with the permit?
- 4) Is the completed hydraulic project consistent with hydraulic code rules or design guidelines?

Culvert Monitoring



Culvert Monitoring in 2013

- 54 HPA permits reviewed
- Focused on four critical structural dimensions:
 - culvert width at streambed
 - culvert slope
 - countersunk depth at outlet
 - culvert length

Proper Implementation?

- No-slope Culvert

- culvert width at streambed \geq bankfull width
- culvert slope = 0 %
- countersunk depth at outlet \geq 20% of culvert rise

- Tolerances **Slack**

- culvert width at streambed: 5% of specified width
- culvert slope: $\pm 2\%$
- countersunk depth at outlet: 5% of specified depth
- culvert length: 5% of specified length or 1 ft

Major Findings

1. Did the permittor issue a complete permit, that is, one that contains provisions and/or project plans for all critical structural dimensions?

- A. One-fifth of permits lacked a specification in permit provisions or project plans *for at least one critical structural dimension*.
- B. Permits for 9 culverts lacked information needed to determine compliance (for at least one critical structural dimension).
- C. The design type could not be determined for 9 of 54 culverts (17%).

3. Did the permittee comply with the permit?

A. Permittee compliance with permit for the four critical structural dimensions was 76% (N=45).

B. 11 culverts (24%) were noncompliant:

5 were too narrow and 6 were countersunk too shallow.

C. Compliance with permit by culvert type:

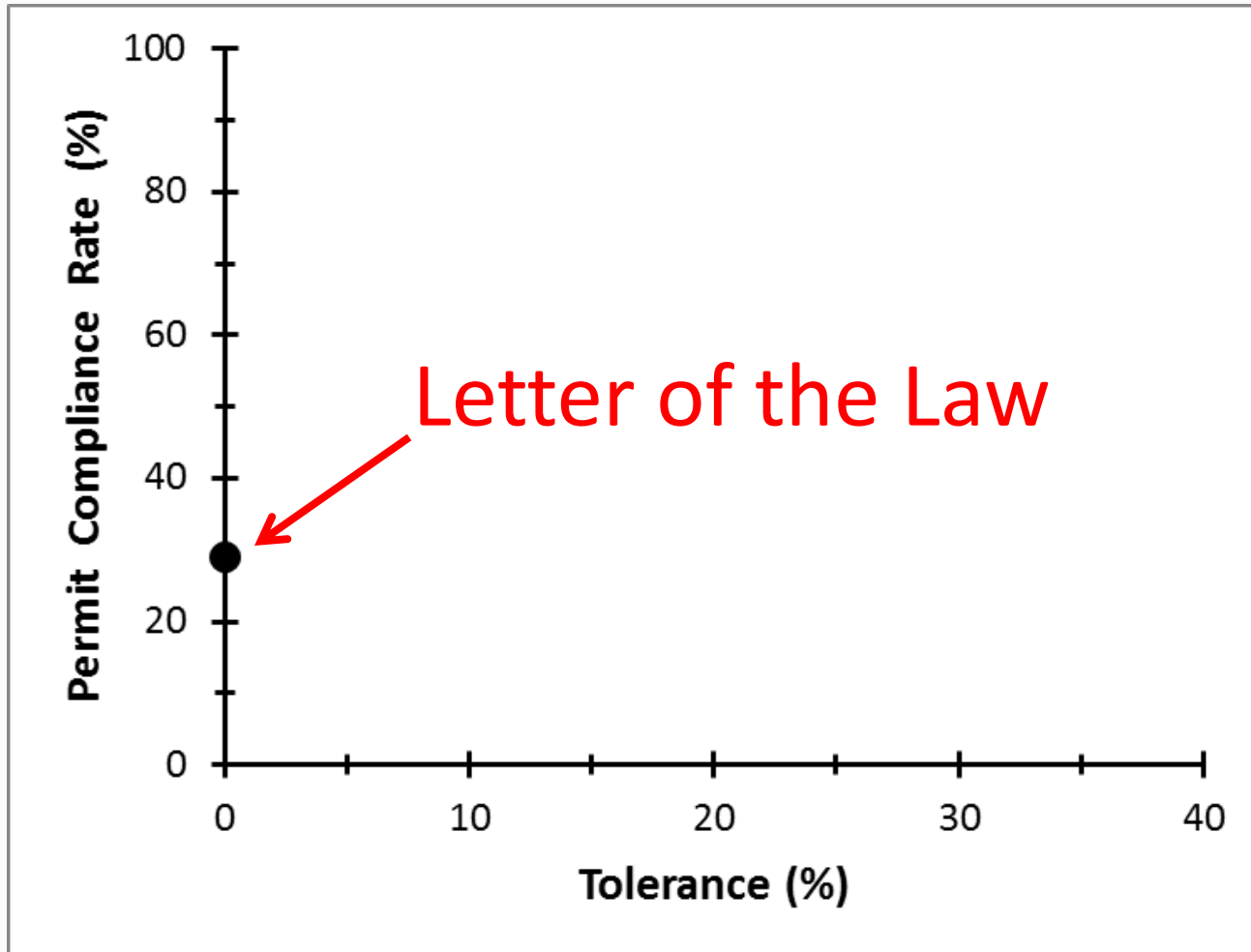
| | |
|-------------------|---------------|
| no-slope | 85% (N= 13) |
| stream simulation | 60% (N=10) |
| bottomless | 85% (N=13) ** |
| unknown | 67% (N=9) |

4. Is the completed hydraulic project consistent with hydraulic code rules or design guidelines?

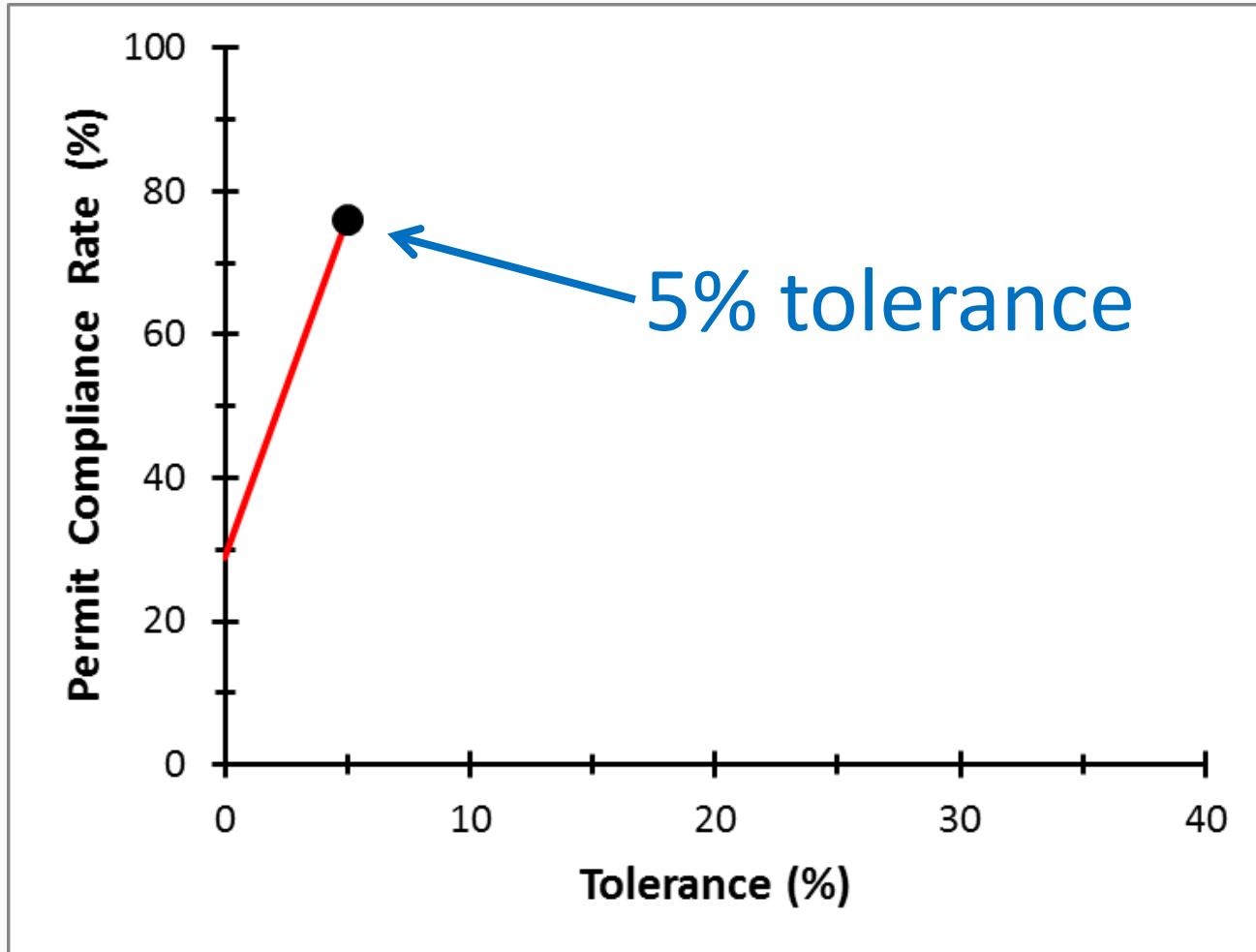
- A. 50% of 40 culverts had a critical structural dimension that was not consistent with the hydraulic code rules or culvert design guidelines.
- B. Consistency with rules for no-slope culverts:
 - 47% (N=19) using our monitoring team's BFW estimates;
 - 80% (N=10) using the permittees' channel width estimates.
- C. *Finding for consistency with rules/guidelines may be unreliable because we lack a widely accepted, standard procedure for measuring BFW.*

What is
Compliance?

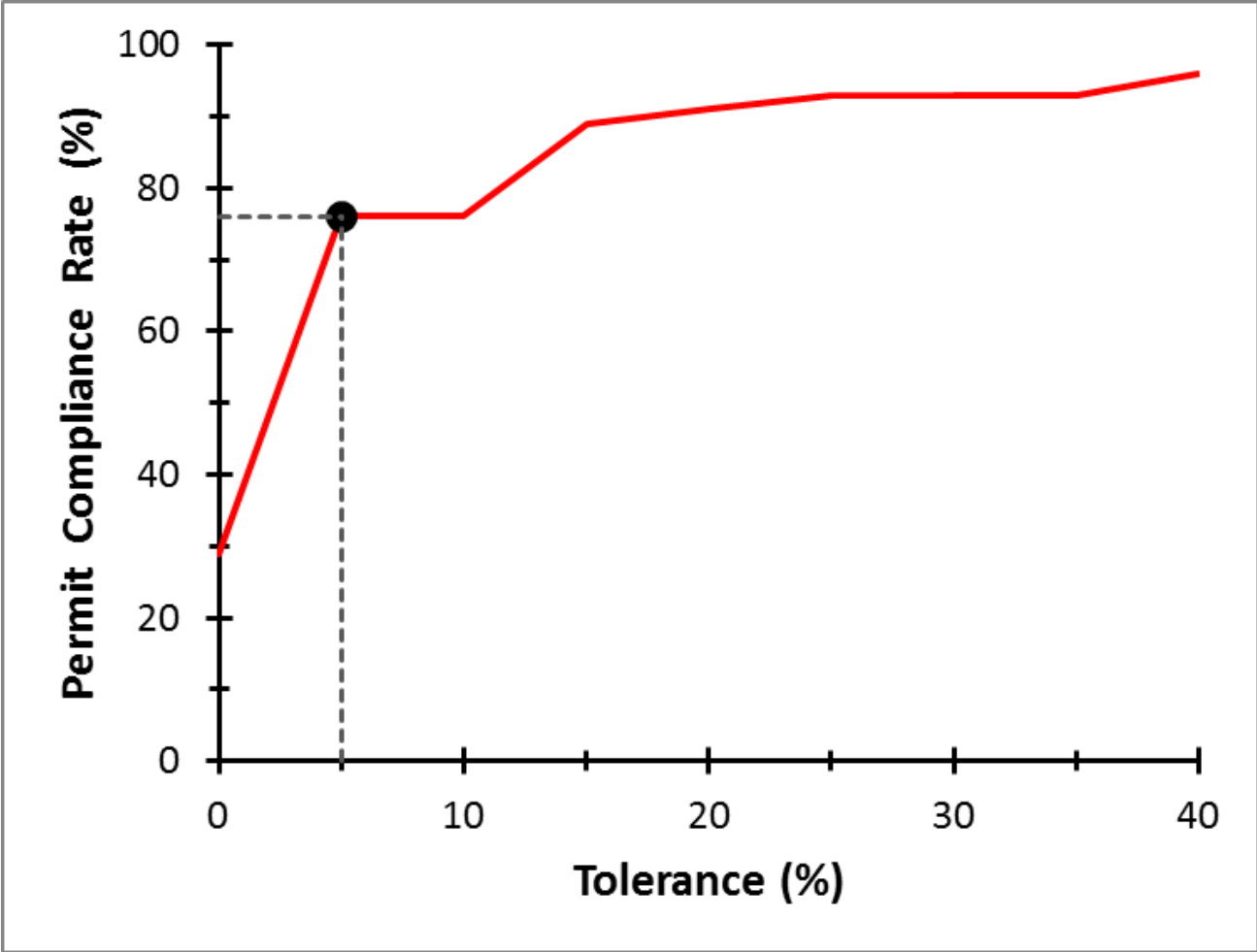
Compliance Rate vs. "Slack"



Compliance Rate vs. "Slack"



Compliance Rate vs. "Slack"



Recommendations for Culvert HPAs

1. Key information – such as bankfull width, channel slope, culvert design type, and culvert dimensions – should be reported and easy to find in application and permit.
2. Standard procedures for estimating mean bankfull width and channel slope should be developed by WDFW and widely distributed for use by HPA applicants.
3. Bankfull width measurements submitted by HPA applicants should be checked by WDFW or some other credible organization.
4. The meaning of “compliance” should be formalized.

Marine Shoreline Armor Monitoring 2013/14



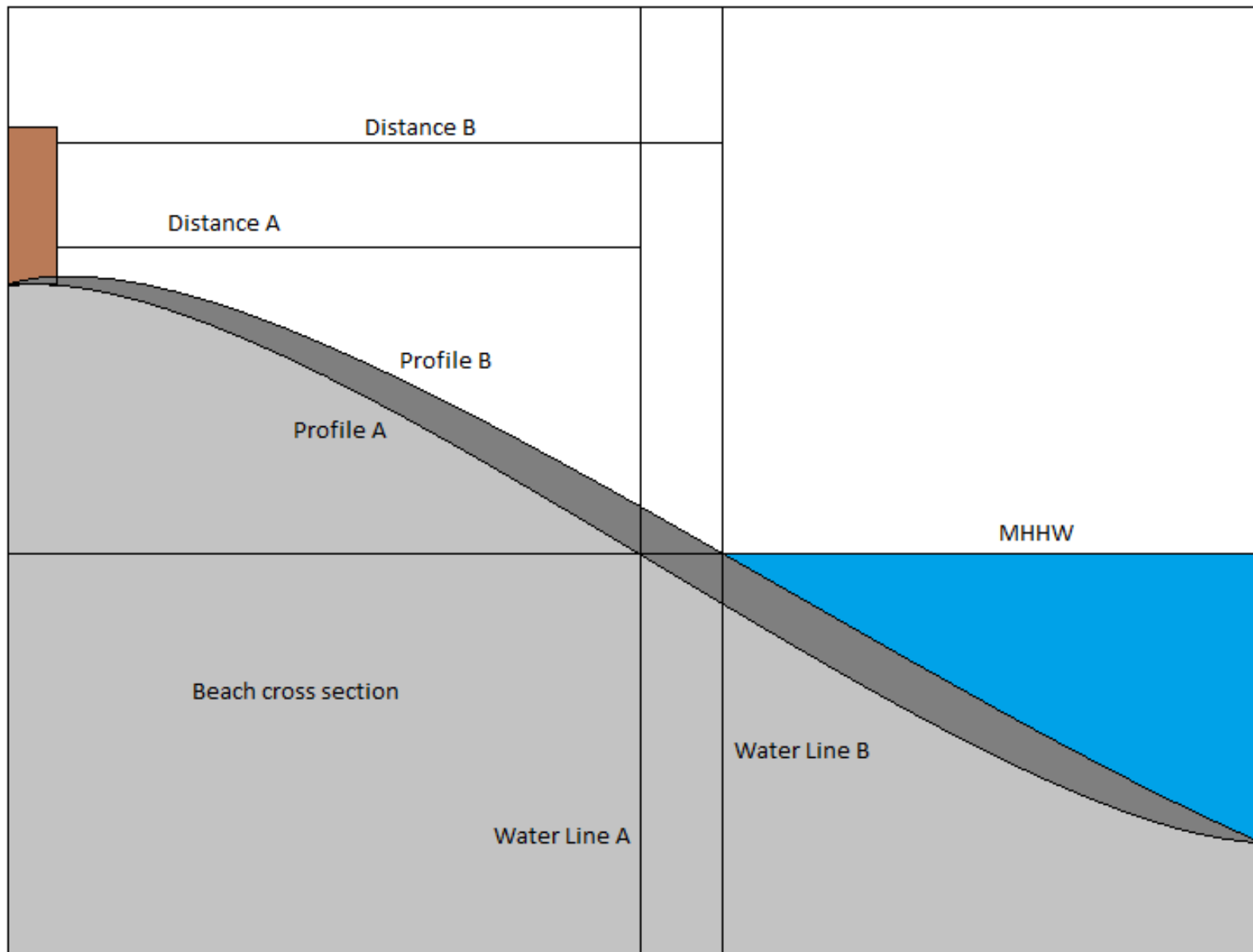
Major Findings

Did the permittor issue a complete permit, that is, one that contains provisions and/or project plans for all critical structural dimensions?

- A. 94% (48 of 51) of permits provided information about the project's length.
 - *However, 29% (14 of 48) of permits, only provided armor length in supporting documentation or required length be measured from project plans.*

- B. 100% (51) of permits provided some reference to the waterward extent of the structure.
 - *Only 45% (23 of 51) of permits described the structure's location as a distance to a repeatable benchmark or permanent structure.*

Beach elevation as horizontal reference



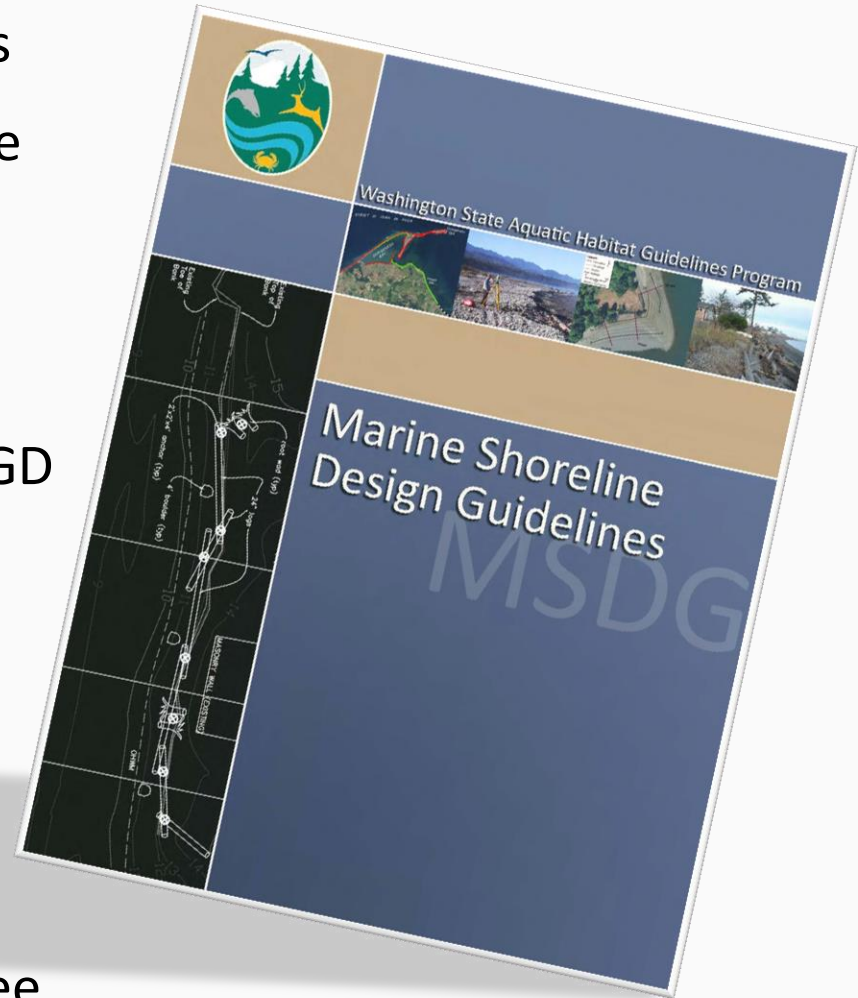
Major Findings

Did the permittee comply with the permit?

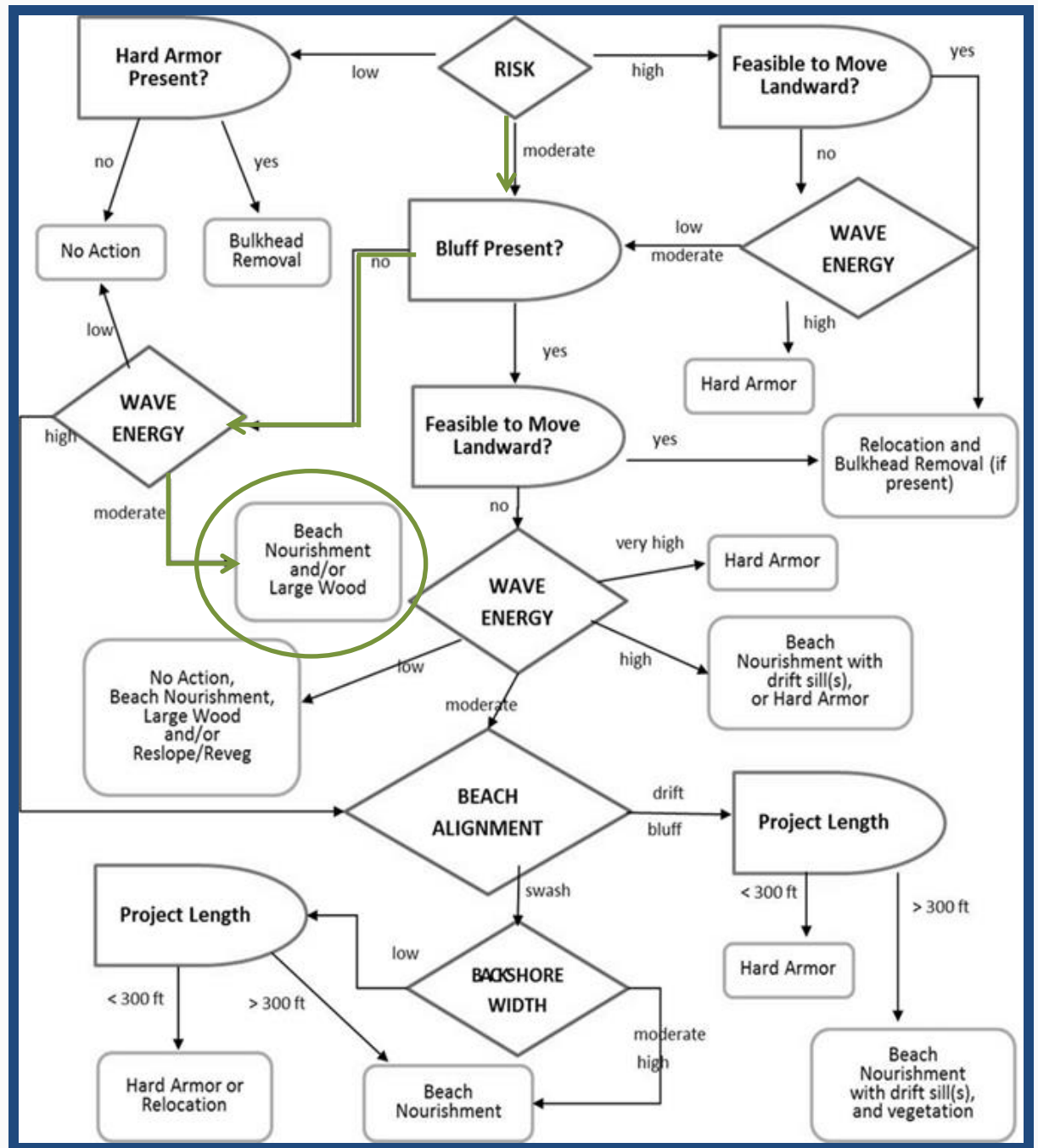
- A. 38% (9 of 24) of projects had at least one key structural dimension that was inconsistent with the permitted dimension.
- B. 26% (11 of 42) of projects were longer than indicated in the permit.
- C. 13% (3 of 24) projects were further waterward relative to at least one measurable reference elevation.

Risk Assessment

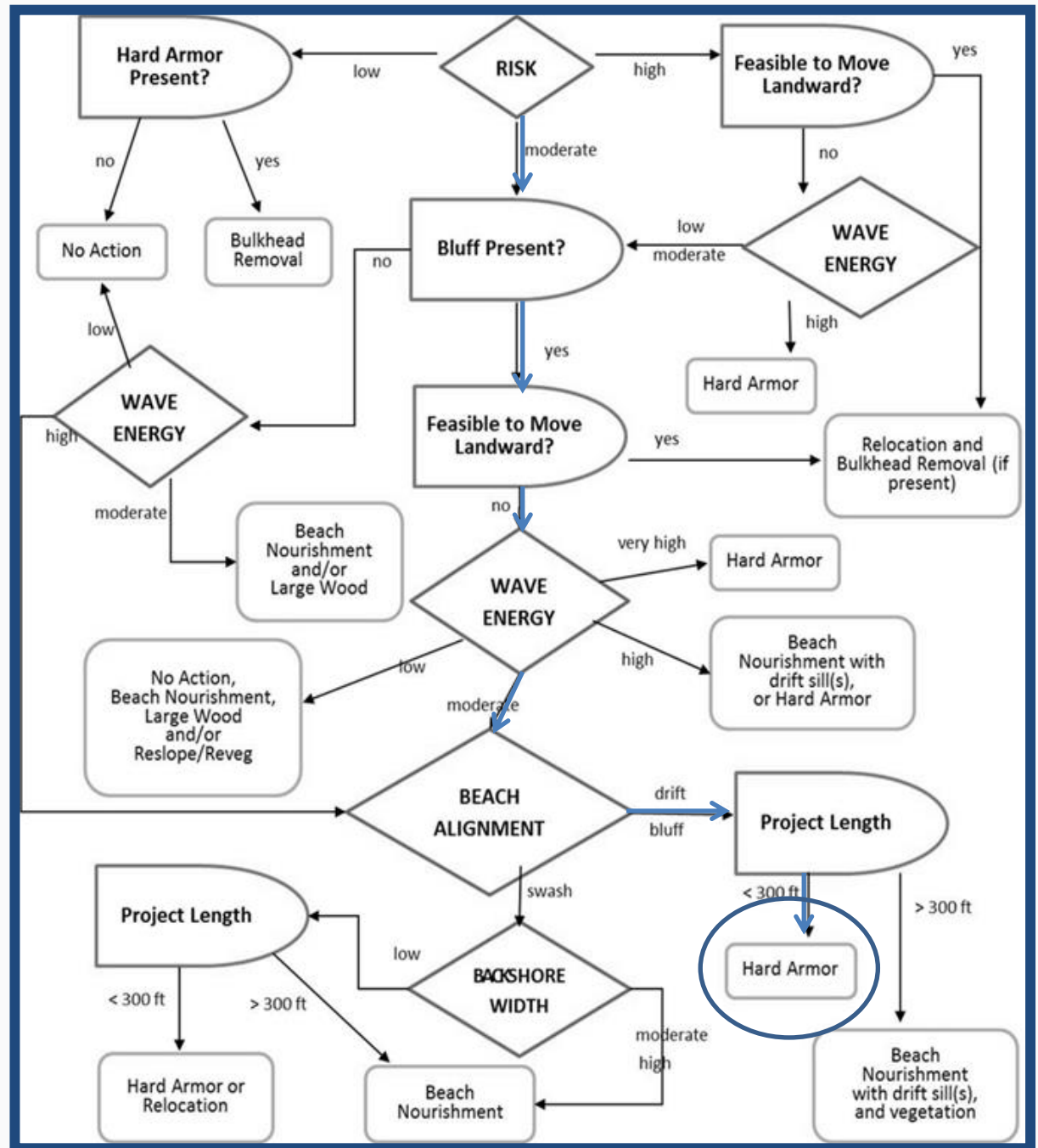
- Marine Shoreline Design Guidelines (MSDG) published in 2014; after the permits we reviewed were issued.
- We completed the preliminary MSGD risk assessment and alternatives analysis for 85 permitted projects.
- We compared guidance from the analysis with the project plans to see how often they matched.



Alternatives Analysis Design Decision Tree



Alternatives Analysis Design Decision Tree



Marine Shoreline Stabilization Design Comparison Results

| Project Type | Shoreline Stabilization Design Comparison | | | |
|--------------|---|--------------|-------|----------------|
| | Consistent | Inconsistent | Total | Consistent (%) |
| New | 9 | 19 | 28 | 32.1 |
| Extension | 0 | 5 | 5 | 0.0 |
| Replacement | 15 | 37 | 52 | 28.8 |
| Total | 24 | 61 | 85 | 28.2 |

72% (61 of 85) HPA permitted project designs were **inconsistent** with MSDG recommendations

Marine Shoreline Stabilization Risk Comparison Results

| Project Type | Project Design Comparison HPA Risk <i>versus</i> MSDG Risk | | |
|--------------|---|------------|---------|
| | Lesser | Consistent | Greater |
| New | 3 | 9 | 16 |
| Extension | 0 | 0 | 5 |
| Replacement | 0 | 15 | 37 |
| Total | 3 | 24 | 58 |

95% (58 of 61) of inconsistent comparisons assumed **greater risk** in HPA design than generated from MSDG.

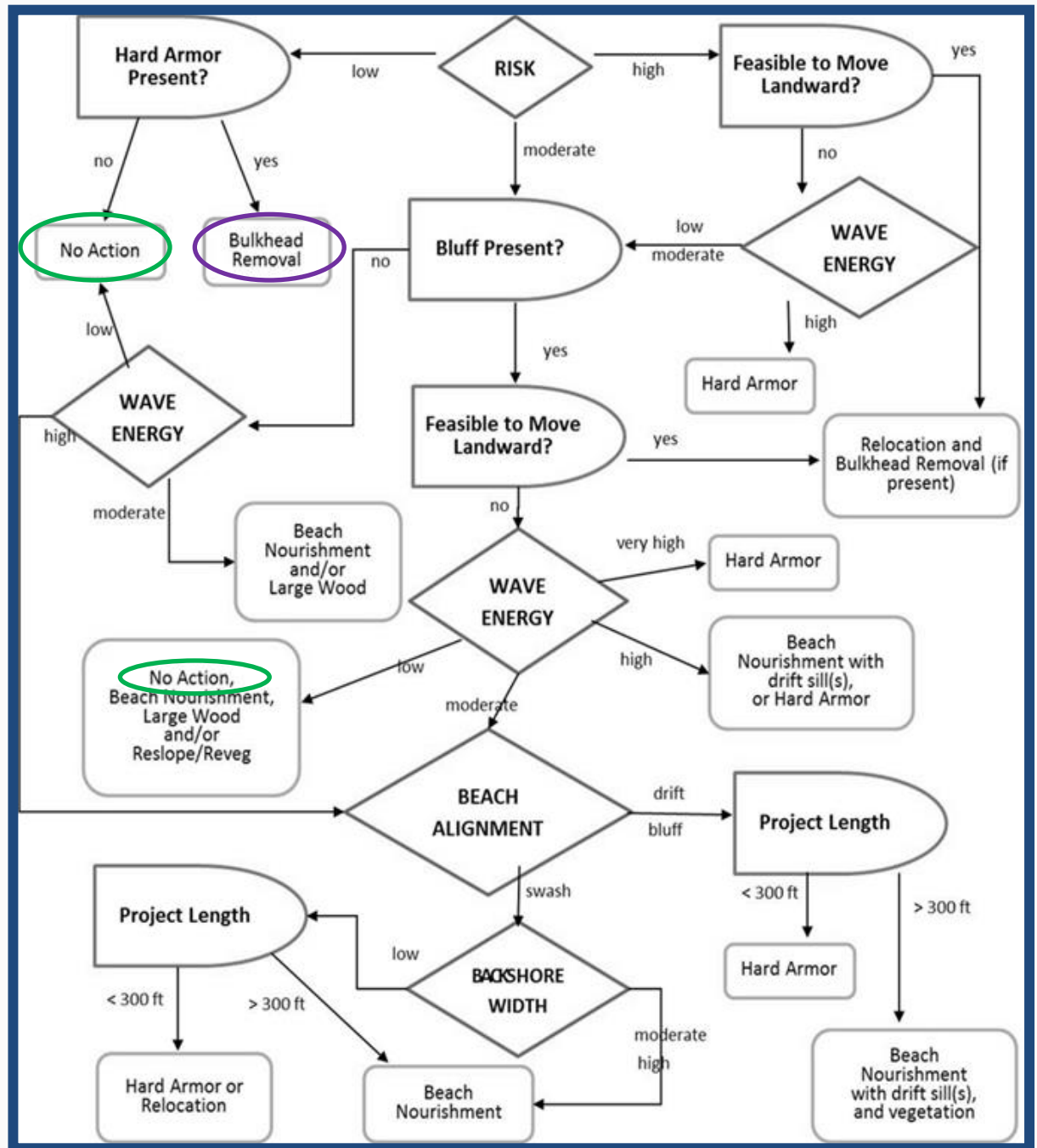
Marine Shoreline Stabilization Risk Comparison Results

| Project Type | Project Design Comparison HPA Risk <i>versus</i> MSDG Risk | | |
|--------------|---|------------|---------|
| | Lesser | Consistent | Greater |
| New | 3 | 9 | 16 |
| Extension | 0 | 0 | 5 |
| Replacement | 0 | 15 | 37 |
| Total | 3 | 24 | 58 |

5% (3 of 61) of inconsistent comparisons assumed **lesser risk** in HPA design than generated from MSDG.

Our analysis did not include:

- BMP
- No Action
- Removal



Areas for Improvement

1. Utilize the MSDG to guide projects and the permitting process to implement best management practices.
2. Ensure that the project dimensions are provided by plans and permits, and are accurate and sufficient to inform implementation and effectiveness monitoring.
3. Provide documented justification when protective provisions are omitted from a permit, or applied to a permit when it would appear to be above or beyond the guidelines or rules.

Questions?

Main Recommendations for Improving the HPA Permitting Process

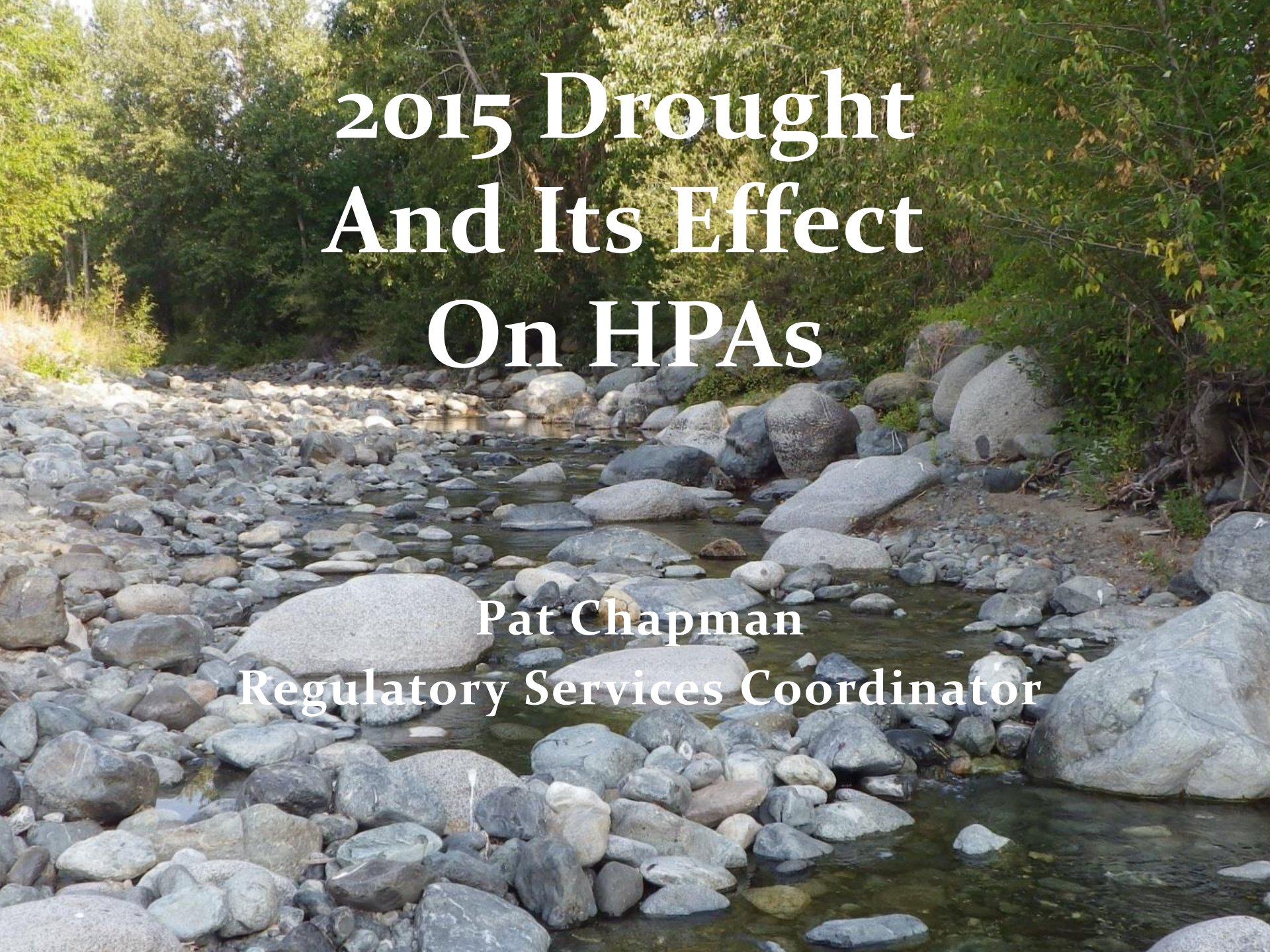
Marine Shoreline Armoring

1. Key information – such as bulkhead length, bulkhead design type –should be reported and easy to find in application and permit.
2. The location of marine shoreline armoring should be described in HPA applications with respect to engineering benchmarks or permanent structures that will not change over time.

Major Findings

3. Did the permittee comply with the permit?

- A. 43% (18 of 42) of projects had at least one key structural dimension that was inconsistent with the permitted dimension.
- B. 26% (11 of 42) of projects were longer than indicated in the permit.
- C. 42% (10 of 24) projects were further waterward relative to at least one measurable reference elevation.

A photograph of a stream flowing through a rocky landscape. The water is shallow and clear, reflecting the surrounding greenery. The stream is surrounded by numerous large, smooth, grey rocks of various sizes. The background is filled with dense, lush green trees and foliage, suggesting a forested area. The overall scene is peaceful and natural, but the rocky terrain and shallow water suggest a lack of significant water flow, consistent with the theme of drought.

2015 Drought And Its Effect On HPAs

Pat Chapman
Regulatory Services Coordinator

Peshastin Creek



Rattlesnake Creek



Box Canyon Creek



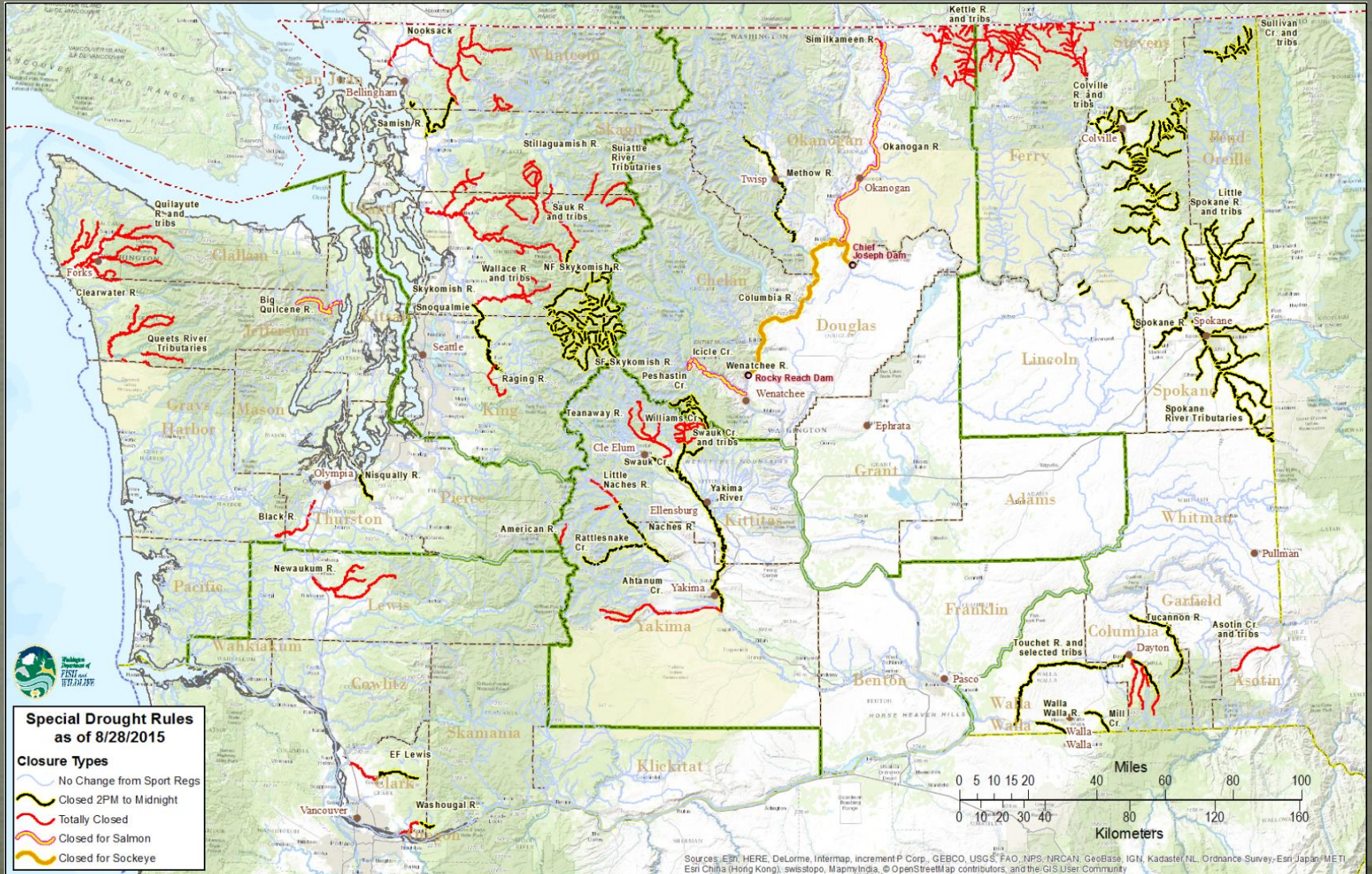
Gold Creek



Emergency Rule Changes

- Problem: Fishing and Pamphlet HPA rules contain seasons (work times) that leave fish vulnerable due to drought conditions
- Solution: Fish Program and Habitat Program coordinated on stream closures
 - Closures based on stream flow & temperature
 - 2 closure types
 - “Hoot Owl” closures (2pm – midnight)
 - Total closures

Fishing Closures



Pamphlet HPA Timing

| | |
|--------------------------|------------------------|
| Gold Creek (38.MISC) | July 16 - February 28 |
| Swauk Creek (39.1157) | July 16 - September 30 |
| Baker Creek (39.1157) | July 16 - September 30 |
| First Creek (39.1157) | July 16 - September 30 |
| Iron Creek (39.1157) | July 16 - September 30 |
| Williams Creek (39.1157) | July 16 - September 30 |
| Boulder Creek (39.1157) | July 16 - February 28 |
| Cougar Gulch (39.1157) | July 16 - February 28 |

Emergency Rule Changes

August 12 - First emergency rule changes for fishing, suction dredging, and aquatic plant control
8 subsequent changes to emergency rules

- Additional closures due to worsening drought
- Lifting of closures following cooler, wetter weather
- Corrections of administrative errors
- Future modifications as drought conditions change

RULE-MAKING ORDER

Agency: Washington Department of Fish and Wildlife

Effective date of rule: **Emergency Rules 15-361**
 Immediately upon filing.
 Later (specify) _____

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
 Yes No If Yes, explain: _____

Purp Min: **NEW SECTION** 200H 04.012, 77.04.020, 77.12.045 and 77.12.047

WAC 220-660-30000I Mineral prospecting

Notwithstanding the provisions of WAC 220-660-300, effective immediately until further notice it is unlawful to violate the following provisions, provided that unless otherwise amended, all permanent rules remain in effect:

Chelan County
Wenatchee River from mouth to the Icicle River Road Bridge: Closed to suction dredging.

Icicle River from the mouth to 500 feet downstream of the Leavenworth National Fish Hatchery Barrier Dam: Closed to suction dredging.

Peshastin Creek and all tributaries: Closed daily to suction dredging from 2 PM to one-half hour after official sunset.

Modifying Active HPAs



Washington
Department of
FISH and
WILDLIFE

HYDRAULIC PROJECT APPROVAL

RCW 77.55.021 - See appeal process at end of HPA

North Central
1550 Alder Street NW
Ephrata, WA 98823-9699
(509) 754-4624

Issue Date: June 11, 2014

Control Number: 133559-1

Project Expiration Date: July 31, 2018

FPA/Public Notice #: N/A

PERMITTEE

David Reitz
74301 N Grosscup Rd
West Richland, WA 99353

AUTHORIZED AGENT OR CONTRACTOR

Project Name: Mineral Prospecting in Blewett Pass A

Project Description: Small scale mineral prospecting on the Bedrock Prospectors Club's Claims in Middle Fork Shaser, Peshastin, Scotty and Little Scotty Creeks, using an authorized 4" dredge/Highbanker using a 4" nozzle.

PROVISIONS

1. This Hydraulic Project Approval (HPA) authorizes mineral prospecting with a suction dredge and/or high-banker/suction dredge combination used solely as a suction dredge with a nozzle size no greater than four and one-quarter inches to account for manufacturing tolerances and possible deformation of the nozzle, with a high-banker/power sluice operating outside the wetted perimeter, or with other hand-held mineral prospecting equipment at the locations identified in Provision #2 and during the timing in Provision #3 of this HPA within the following listed creeks on the identified Bedrock Prospectors Club's claims.

Modifying Active HPAs

- Active HPAs may contain in-water work windows in conflict with drought closures
- Database search yielded >800 HPAs with potential conflicting work windows
 - Biologists reviewed these to determine still active projects
 - Modified a few permits after consultation with permittee

HPA for Removing Fish Blockages



HYDRAULIC PROJECT APPROVAL

Washington Department of Fish & Wildlife
PO Box 43224
Olympia, WA 98504-3224
(360) 902-2200

Permit Number: 2015-9-55-01
FPA/Public Notice Number: N/A
Application ID: 4545

AUTHORIZED AGENT OR CONTRACTOR

PERMITTEE
Washington Department of Fish and Wildlife
ATTENTION: Teresa Scott
600 Capitol Way North
Olympia, WA 98501

Project Name:
Project Description:

Drought 2015 Low Flow Fish Migration Blockage Remediation
Provide temporary passage for fish that are blocked because of low flows resulting from drought conditions. Alternatives include building temporary fishways, creating temporary channel modifications that concentrate flow, or trapping fish for transfer upstream or to hatchery facilities.

Questions?

