

A scenic photograph of a rocky beach with driftwood and a dense forest in the background. The beach is covered in small, light-colored pebbles and larger, dark rocks. Several pieces of weathered driftwood are scattered along the shoreline. The background is a thick forest of green trees and shrubs.

Troubleshooting Action Planning Course Correction Tracking and Monitoring

“Shoreline Permitting Effectiveness Through T.A.C.T”

*Marine Nearshore NEP Grant (WDFW) #12-2114
Kitsap County, Department of Community Development*

BACKGROUND

- Previous work done by the San Juan Initiative (2006-08) in San Juan County assessed current nearshore ecosystem protection programs and recommended improvements.
- Findings demonstrated:
 - Waterfront property owners need technical assistance
 - Key mechanisms in permit review and issuance are lacking, which limit compliance and may enable non-compliance
 - A coordinated system for tracking and monitoring shoreline permitting is needed

Purpose of TACT

- Objectively review the marine shoreline stabilization permit processes for Kitsap and San Juan Counties, in conjunction with that of WDFW's HPA process.
- To use the findings from the San Juan Initiative as a starting point to **T**roubleshoot, draft an **A**ction plan, incorporate **C**ourse corrections that are then informed and validated by **T**racking and monitoring.

Troubleshooting

Looked at County and State (HPA) shoreline armoring permits for the 2007-2012 period (2006-2013 for SJC).

TABLE 1. TROUBLESHOOTING PERMIT STATISTICS

	Miles of marine shoreline	Total Permits	Residential	New	Repair/ Replacement	Hybrid	Falls under State Exemption for Single Family Res.	Most applications (year)	Least applications (year)
Kitsap County	216	66	65 (98%)	9 (14%)	56 (85%)	3 (5%)	60 (92%)	2010 (18)	2012 (7)
San Juan County	408	75	62 (83%)	30 (40%)	45 (60%)	4 (5%)	54 (72%)	2006 (30)	2011 (7)

Troubleshooting

TABLE 2. HPA PERMIT MATCHES TO LOCAL PERMITS

	Number of Permits (in HPA system)	Number Matched with HPA	Number Unmatched with HPA	Reason for Unmatched Result
Kitsap County	56	53	3	2 permits denied by KC 1 permit was “after-the-fact”
San Juan County	82*	62	17	17 undetermined

*3 local permits had 2 matching HPAs, therefore the number of permits in the HPA system is artificially higher (82 rather than 79)

Categories of the Issues

- Permit Forms
- Permit Review
- Monitoring & Tracking
- Inspections
- Outreach

Action Planning

- Identify the next steps to improve the issues - including estimated time, effort, cost/benefit, and measure of efficiency.
- Internal and external stakeholder review and feedback.



Course Correction

- Selected Actions to work on during grant period
- Begin implementation, with continual feedback from ongoing Tracking and Monitoring task

FINAL TACT REPORT CARD

PROGRAM ELEMENT	DEFECT / CONCERN	IMPROVEMENT	ESTIMATED TIME/EFFORT (Staff hours)	COST	MEASURE OF EFFECTIVENESS	ESTIMATED BENEFIT	PRIORITY	Selected Action (Y/N)	RESULTS
I. Permit Forms	a. From applicants perspective, permit forms are duplicative and confusing (SJC only?)	1. Populate fields so that information has to be entered once electronically (name, address, parcel#, contact info, permit #, etc.) 2. Consider using the JARPA form as a template for the SJC shoreline permits so applicant fills it out once [not so much a template, as THE application, the county cover 3. Clarify permit process by including direction or links to get information required by checklist and examples of site plans with list of specific information requested.	High Low Low	\$\$\$ \$ \$	i) Autopopulation functions ii) Staff and client survey on time saved and typo errors avoided	Moderate to client/ permit staff	NA Yellow Red	N Y Y	 SJC will consider after SMP update is adopted. In process
	b. SJC's cover sheet is not clear that filling out a JARPA is the way to obtain an HPA.	1. Make sure County cover sheet is clear when a JARPA is needed for the project; include link to the JARPA website.	Low	\$			Red	Y	In process
II. Permit Review	a. It is unclear and inconsistent when a permit condition should be applied (Kitsap and WDFW)	1. Create a standardized checklist, template or review process for the different permit types 2. Staff training	Moderate Low	\$ \$	i) Staff develops standardized checklist and review process ii) No overlapping permit conditions between Kitsap and WDFW (discrete conditions for each agency) ii) Staff teaches review process to other planners ii) Training taken	High for environment; High for permit staff High for permit staff	Orange Yellow	Y N	See Deliverables
	b. Incorrect definition and/or inconsistent application of HPA condition on local permits	1. Modify HPA condition language per WDFW definition 2. Add a checkbox to the permit file that the HPA was received 3. Training for staff	Low Low Moderate	\$ \$ \$	i) Corrected definition in Kitsap County permit i) Check-box for received HPA added to Kitsap County permit i) Staff teaches checklist use and review process to other planners ii) Training taken iii) Staff survey on consistency of applied HPA condition	Moderate for environment Moderate for permit staff High for permit staff/ clients	Red Red Orange	Y Y N	See Deliverables See Deliverables
	c. There is no documented procedure for permit review and when to apply certain conditions specific to bulkheads	1. Standardized templates for different permit types 2. Provide a standard checklist or procedure for review;	Moderate Low	\$ \$	i) Staff survey on how checklist is working ii) Consistency across conditions applied for specific situations (find a way to measure this)	High for environment	Yellow	Y	See Deliverables
	d. Staff (and public) may not be familiar with existing resources and maps available for use in review; assumption that information in JARPA is accurate	1. Link these resources to permit database and/or public mapping tool 2. Check information in JARPA with these standard resources 3. Further integrate natural resources and planning staff and provide opportunities for cross-training 4. Host trainings that include a LOCAL field component	Low Low Moderate Low	\$ \$ \$ \$	i) Ensure that staff have added specific maps as favorites in their profiles within permitting database SmartGov ii) Staff survey on map usage i) Environmental attributes cross-checked with appropriate map ii) Staff survey on checklist usage	Moderate for environment; Moderate for permit staff Moderate for environment Staff, environment, client Staff, environment, client	Red Red Red NA	Y N Y N	See Deliverables Ongoing Need to be provided @regional level

TABLE 6. COURSE CORRECTION SUMMARY OF ACTIONS TAKEN

Category	Action Taken
Staff Training	Introductory MSDG staff training.
	New SMP and changes to permits for tracking purposes.
	Standardized permit review checklist.
Conditions	Summary and analysis of permit conditions/provisions of each agency.
	Updated definitions; standard conditions improved in new permit system.
Application Consistency	Inclusion of parcel numbers on WDFW permits; HPA attached to local permit when received.
	Consistent naming conventions (and definitions) in process of being added to both
	HPA and local permit applications for type of shoreline stabilization (new, repair, replacement, removal, enhancement). Enhancement definition is still in question, but generally any replacement, in whole or in part, with a “softer” design would qualify. This may not affect the permit type, but may provide eligibility for other incentives (see Conclusions: Next Steps).
	Tracking metrics are being added, but final changes are in flux as the jurisdictions figure out how to tie these with required SMP “no net loss” monitoring. WDFW has added: Length (existing and new), Waterward Extent (including a reference to a stable structure), and Height. These are likely to be added or tracked through the local process as well.
Flow Chart / Outreach Materials	Staff review guide completed (see Training).
	Local review process flow chart for staff and applicant use (See <i>Appendix F</i>).
	Overall permit process diagrams (See <i>Appendix F</i>).
	San Juan County produced additional outreach materials for applicants (See <i>Appendix F</i>).
Coordination	Notification of receipt of application by other agency- WDFW APPS permit system can now be queried by jurisdiction staff; for new SMPs, jurisdictions will be posting online the shoreline applications on a weekly basis (in development).
	General coordination has increased through TACT process, which may facilitate better site visit/inspection coordination (see Findings for limitations).

Marine Shoreline Stabilization Permit Monitoring

- **Effectiveness monitoring**
 - Do rules and guidelines governing permits result in projects that protect property and habitat?
- **Implementation monitoring**
 - Is the permit consistent with hydraulic code rules and design guidelines?
 - Did the issued permit contain provisions and all critical structural dimensions?
 - Did the project follow the rules and guidelines of the permit when it was built?

Sample Set

Where: Kitsap and San Juan Counties

When: Permits applied for in 2006 – 2014

What: Permits for *new*, *extension*, or *replacement* shoreline stabilization

Permit Review

New	Extension	Replacement	<u>Total</u>
28	5	52	<u>85</u>

Site Inspection

New	Extension	Replacement	<u>Total</u>
21	3	27	<u>51</u>

Findings from Implementation Monitoring

Is the permit consistent with hydraulic code rules and design guidelines?

Of 85 total permits reviewed:

16% occurred on documented surf smelt habitat

8% occurred on documented sand lance habitat

21% occurred on documented herring habitat

Protective work windows on documented habitat **46%** of the time

*-Protective work windows were provisioned for **12%** of beaches where the forage fish was not documented.*

71% of projects on documented Surf Smelt beaches included beach nourishment as prescribed by the WAC

*-Beach nourishment was also included on **65%** of beaches where surf smelt were not documented.*

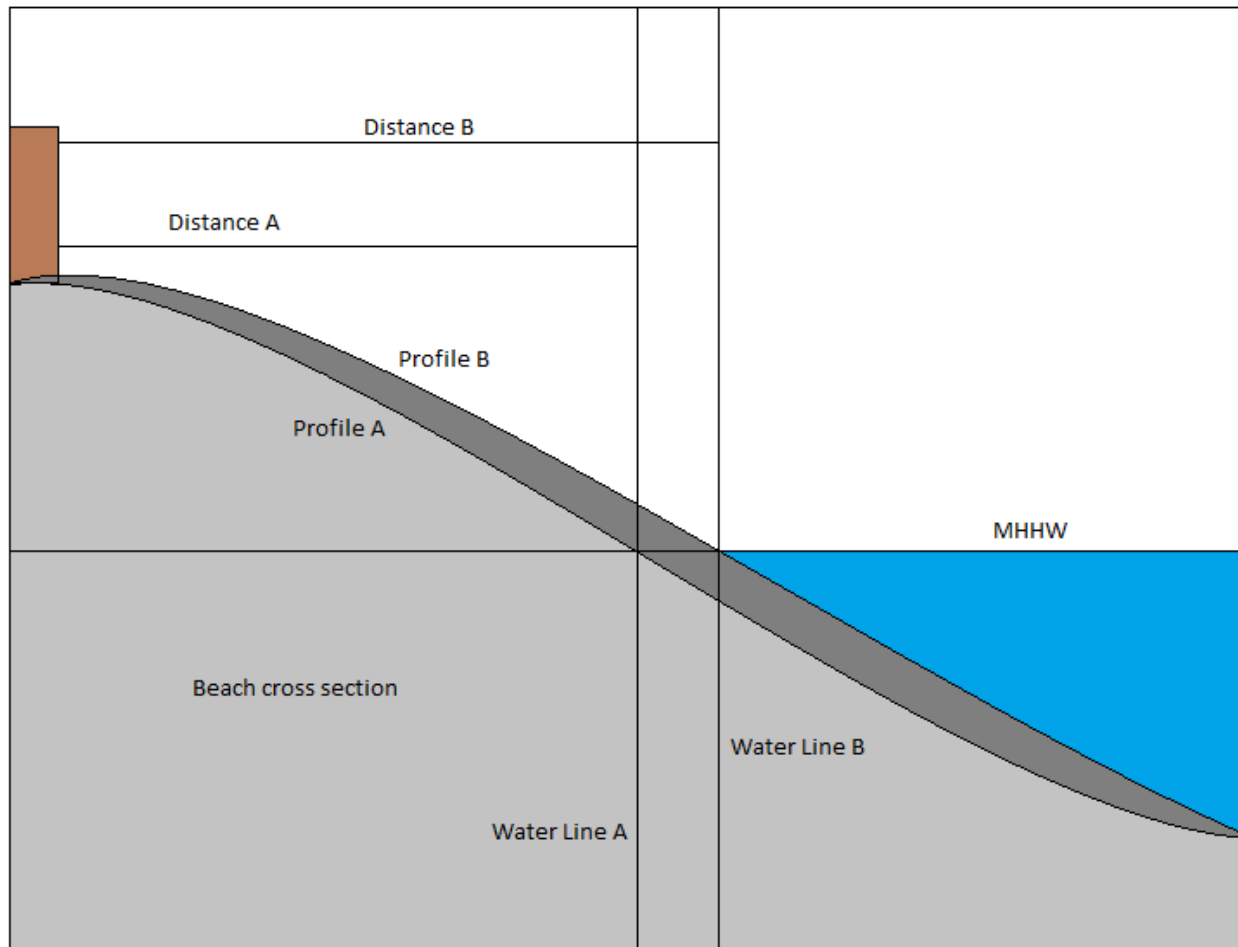
Findings from Implementation Monitoring

Did the issued permit contain provisions and all critical structural dimensions?

27% of 51 permits had no clear statement of the project length in the permit text. Length in supporting docs or measured from plans.
6% provided no length at all.

Of 51 permits, **only 45%** described the structure's location as a distance to a *repeatable* reference or permanent structure.

Non-repeatable reference



Findings from Implementation Monitoring

Did the issued permit contain provisions and all critical structural dimensions?

27% of 51 permits had no clear statement of the project length in the permit text. Length measured from plans or supporting docs.
6% provided no length at all.

Of 51 permits, **only 45%** described the structure's location as a distance to a *repeatable* reference or permanent structure.

Vague, inconsistent and missing information made permit review time consuming and increased the potential for misinterpretation.

Findings from Implementation Monitoring

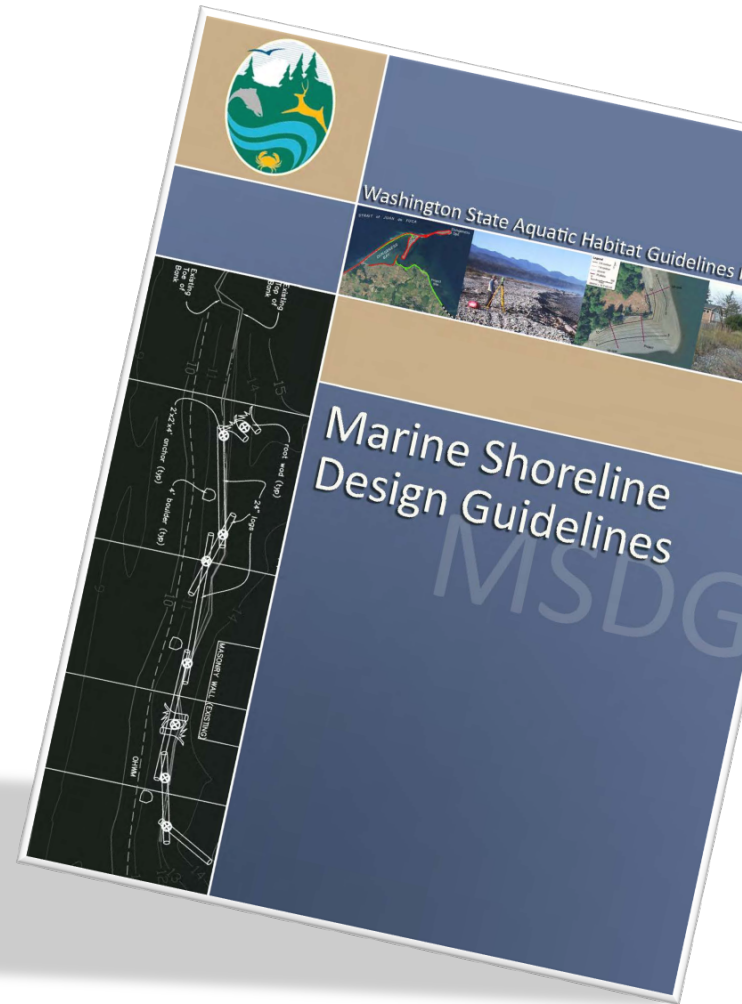
Did the project follow the rules and guidelines of the permit when it was built?

- **46%** of 45 had at least one structural dimension that was *inconsistent* with the permitted dimension
 - **26%** of 42 were *longer* than indicated in the permit
 - **26%** of 34 were *taller* than indicated in the permit
 - **13%** of 24 were *farther waterward* relative to at least one reference provided

Structural compliance was challenging to assess after construction due to a lack of information and the use of reference points that could change over time or be altered by construction.

Marine Shoreline Armoring: Risk Assessment

- Impacts of Armoring (Ch 1)
- Stewardship (Ch 2)
- [Site Assessment \(Ch 3\)](#)
- [Coastal Process Assessment \(Ch 4\)](#)
- [Alternatives Analysis \(Ch 5\)](#)
- Passive Management (Ch 6)
- Alternative Techniques (Ch 7)
- Monitoring (Ch 8)
- Research and Development (Ch 9)
- Case Studies (Appendix A)
- Literature Review (Appendix B)



Site Assessment Cumulative Risk Score

EROSION POTENTIAL

SHORETYPE
SCORE

+

FETCH
SCORE

=

X

X

INFRASTRUCTURE THREAT

SETBACK
SCORE

+

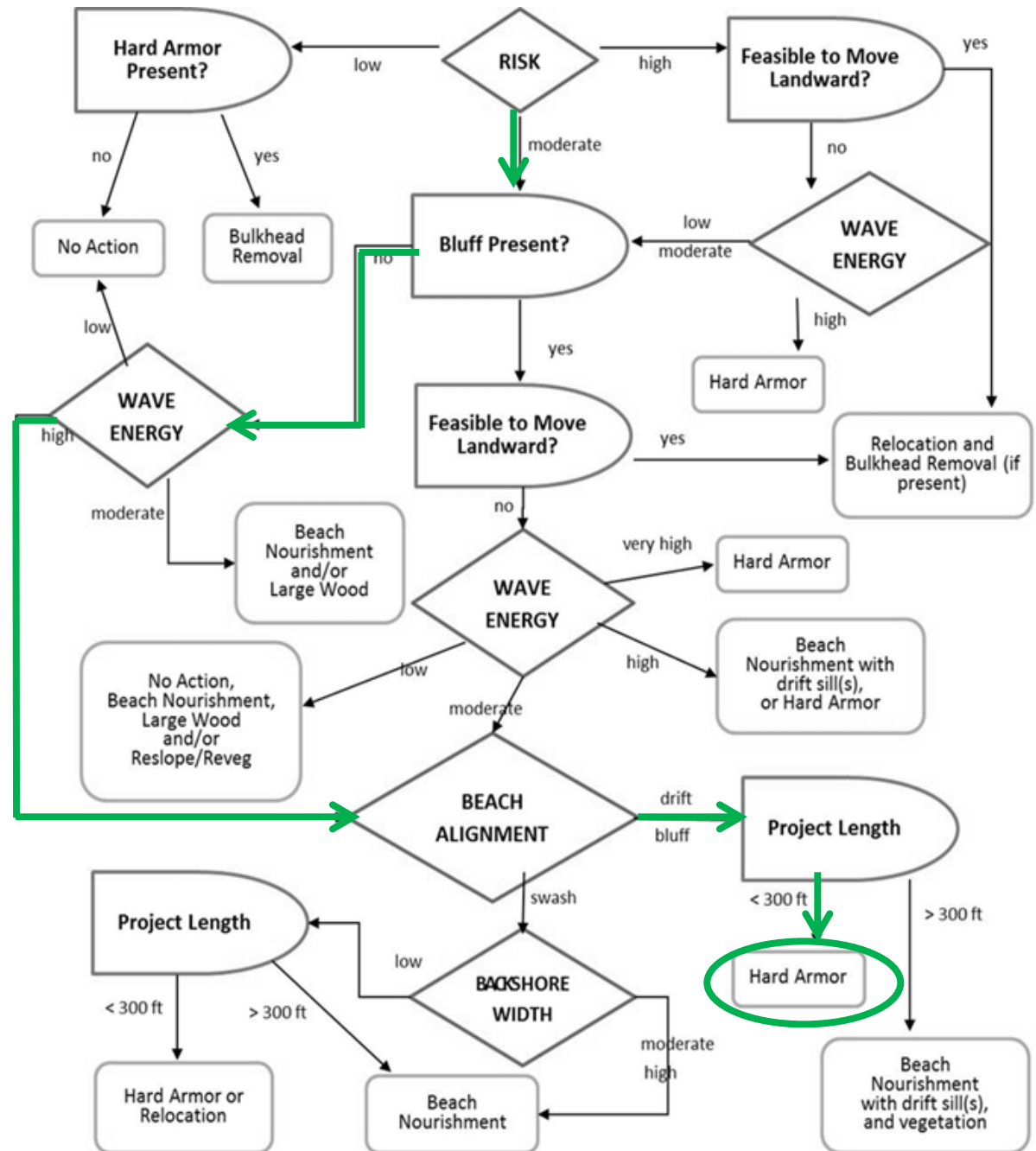
INFRASTRUCTURE
SCORE

=

Y

RISK
SCORE

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

Conclusions and Recommendations

Common Identifiers for local and state permits

- Parcel # for permit tracking
- Project Type - standard definitions and use
 - New
 - Repair
 - Replacement
 - Enhancement

Standardized Dimension Information on permits

- Length
- Height
- Design Type

Conclusions and Recommendations

Inspections

1. Initial – before project beings
 - Document pre-existing conditions
 - Establish OHWM, top of bank, etc.
 - Collect monitoring data
2. After Staking – *BEFORE* construction begins
 - Make sure project is located correctly
 - Chance to change location if necessary
3. After Completion
 - Was the project constructed per permit?

Conclusions and Recommendations

Documentation

- ***Standardize* how to document changes due to construction using permanent structures, engineering benchmarks, or other methods that won't change over time**
- **Document justification when protective provisions are omitted or applied to a permit when it would appear necessary or beyond the guidelines or rules**
- **Use of MSDG to demonstrate and document need**

Conclusions and Recommendations

WAC Crosswalk

- Need a more detailed cross-walk analysis between WACS (SMA vs. HPA)

Staffing

- Training for field staff
- Coordinated site visits for inspections
 - ✓ Initial
 - ✓ After staking
 - ✓ Post construction