



## ISLAND COUNTY PLANNING & COMMUNITY DEVELOPMENT

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# Critical Areas Permit Implementation and Effectiveness Monitoring







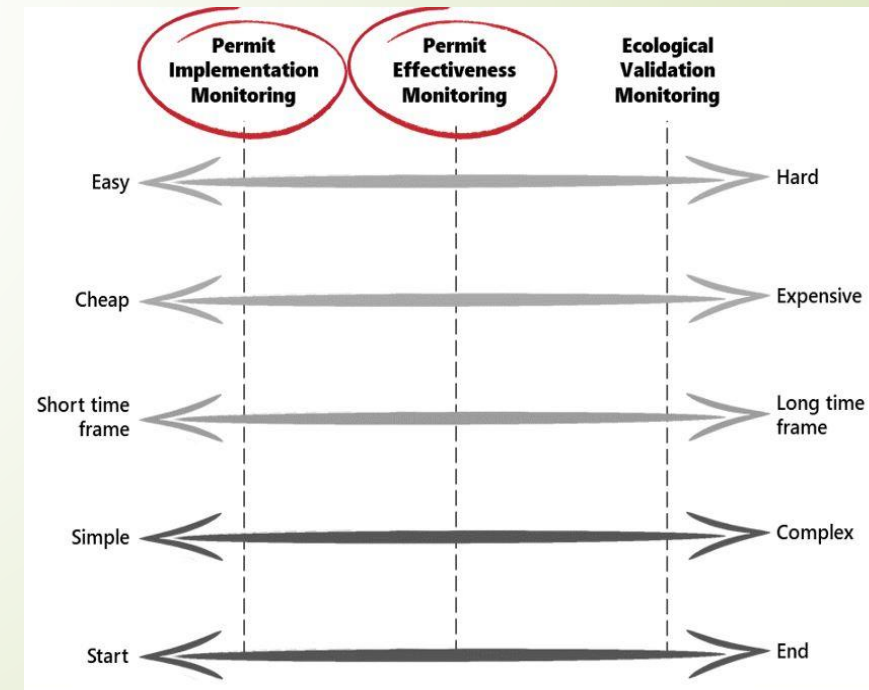
# Overview of Island County Critical Areas Monitoring Programs

- **We currently have three main adaptive management programs in place**
  - Permit Implementation and Effectiveness “Program”
  - Surface Water Quality Monitoring Program (ICC 17.02)
  - Wetland Monitoring and Adaptive Management Program (ICC 17.02A)



# Why Monitor Permit Implementation and Effectiveness

- We often impose strict conditions of approval on permits that impact critical areas or the shoreline
- We also impose requirements for applicants to address critical areas violations
- Common conditions/requirements include
  - Notice to title
  - Conservation Easements
  - Protective buffers
  - Buffer averaging
  - Restoration
    - Includes performance standards
    - takes time
  - Mitigation
    - Includes performance standards
    - takes time







# Key Questions

- **How do we ensure that these conditions are implemented?**
  - Implementation monitoring
- **How do we know if performance standards are met over time?**
  - Effectiveness monitoring
- **Without one you don't have the other**



# Implementation Monitoring

- **We utilize the following tools to our advantage**
  - Permit database
  - Parent Permit Conditions
  - Installation Inspections
  - As-Built reports







# Permit Database

- **We use child “permits” to track implementation and effectiveness of parent permit conditions**
  - Wetland mitigation projects denoted as “MIT” filetype
  - Shoreline projects denoted as “S-MIT” filetype
- **Code violations are tracked using our existing “COV” system**
- **Using this database we have set up**
  - Automatic alerts for inspections, monitoring reports, document submittals, etc.





# Parent Permit Conditions

- **A Typical condition with mitigation associated parent permits**
  - “The Critical Areas Planner shall be notified within 7 days of mitigation installation to schedule an installation inspection. This inspection is required prior to final building inspection of the building permit”
- **Puts the project on our radar**
  - Create necessary physical files
  - Add the project to our database
- **Ensures that mitigation is implemented**
  - Triggers an installation inspection



# Installation Inspection

- Once an inspection is requested by an applicant we visit the site and inspect the mitigation for:
  - Conformance with the approved mitigation plan





# Field Inspection Report

Inspector	William Hallberg, Critical Areas Planner		
Date	1/16/2018		
Parcel Number	S7015-00-02003-0		
Project Type	MIT	<input checked="" type="checkbox"/> S-200T	COV
Reason For Inspection	<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Monitoring	<input type="checkbox"/> Final <input type="checkbox"/> Other

## Notes

During my site inspection I noticed the following species/quantities planted in or near the approved enhancement areas per 028/16 SHE (Table 1).

Table 1 Observed plantings.

Species	Quantity
Dune Grass ( <i>Elymus mollis</i> )	~300 consisting of both plugs and clumps
Serviceberry ( <i>Amelanchier alnifolia</i> )	3
Nootka Rose ( <i>Rosa nutkana</i> )	~49

I estimated the total planting area to far exceed the building footprint within the building setback.

I observed a trail through the planting area accessing the beach which was approved as per the site plan. I also noted small trails to a water spigot and the property to the north. Although these trails were not on the site plan, they are okay as the observed enhancement area easily exceeds the required square footage. However, they shall not be covered with any impervious surface such as gravel or concrete.

Based on these findings it is my opinion that the shoreline enhancement project is in conformance with the shoreline buffer enhancement standards per ICC 17.05A.090.H.

## Results

Did Inspection Pass?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No (see comments)
Additional Work Required?	<input type="checkbox"/> Yes (see comments)	<input checked="" type="checkbox"/> No

## Additional Comments

N/A

Inspector Signature

*William Hallberg*





# As-Built Report

- **Once the project has passed inspection we require the applicant to submit an “As-Built” report**
  - Provides us with a baseline document for comparison with future monitoring reports
- **An “As-Built” typically includes:**
  - A short narrative of the project and the goals
  - A species list and number of plants that were installed
  - The date the planting was complete
  - Photo documentation
- **Once an As-Built is submitted and approved, we start the “monitoring clock”**



# Effectiveness Monitoring

- A typical mitigation project has a 5 year monitoring period
- We use the following tools to our advantage
  - Permit Conditions
  - Monitoring reports
  - Periodic inspections
  - Adaptive management
  - Final inspections






# Permit Conditions

- **Typical condition with mitigation associated permits**
  - “Annual monitoring reports shall be submitted to Island County Planning and Community Development by October 31<sup>st</sup> for a period of five years”







# Monitoring Reports, Periodic Inspections and Adaptive Management

- **Monitoring reports give the ability to:**
  - Compare current conditions with the “As-Built”
  - Determine if projects are meeting their performance standards
  - Trigger **periodic project inspections**
  - **Adaptively manage** those projects that aren’t meeting their performance standards
    - Work with the land owner
    - Enforcement if necessary



# Final Inspections

- Similar in scope to that of an installation inspection
  - Verify that performance standards have been met
  - Identify problems
    - Implement revisions and continue to monitor if needed

## Field Inspection Report

Inspector	William Hallberg, Critical Areas Planner		
Date	1/16/2018		
Parcel Number	S7015-00-02003-0		
Project Type	MIT	3-20011	COV
Reason For Inspection	Initial	Monitoring	Final Other

### Notes

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### Results

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Additional Work Required?	Yes (see comments)	No

### Additional Comments

N/A

Inspector Signature

William Hallberg





# Evaluation and Recommendations

- **Tracking these projects allows us to make more mitigation projects a success**
- **Provides valuable data**
  - Could help us tailor future mitigation projects
  - Make code revisions
  - Revise parent permit conditions of approval
  - Learn from recurring issues
  - Learn from mistakes