

# Waterfront Protection Coalition

Navigating Change,  
Anchored in Unity



# Improve the understanding of the Environmental Science *before we implement a DMP*

1. Currently the DMP is based on a report that is not peer reviewed nor has it been subject to expert and community rebuttal.
2. There is insufficient scientific data in the current MC Wright report to properly inform a scientifically sound dock management plan.
3. There is no presented science to support the DMP in the freshwater or any area of the swiya outside of Pender Harbour.
4. The anthropogenic (human influences) causing environmental harm cannot be addressed with simply removing or shrinking the size of docks & boathouses.

*Solution: We can identify many peer reviewed science papers and reviews that already exist which could improve the plan.*



Only parts of kalpilin have been studied in 2017.

# Use the most appropriate Environmental Science *to develop a defensible and sustainable DMP*

1. The DMP currently relies heavily on studies from locations ecologically unrelated to the BC Coast and BC freshwater lakes. (e.g. Freshwater stream crossing guides, and transparency requirements from piers over salt water marshes in Maryland)
2. Zones proposed have no biophysical justification. Use geographical zone stratification to identify key sensitive locations and to match the mitigation approach to the habitat being managed.
3. Universal application of light penetration requirements are inappropriate in locations where natural eelgrass habitats are unsuitable for it to exist (examples: rock substrate, and at deeper locations).
4. 1976 Shellfish Closure is due to fecal coliform, is most likely attributable to seepage from upland sources, not vessels and docks which are governed by federal legislation.

*Solution: Holistic view to identify all environmental hazards not simply docks and boat houses. Site Specific Science that takes into consideration all potential influencing environmental factors.*



Salt Marshes of Maryland



BC Rocky Coast



Shellfish closure due to septic not docks



Stream crossing guidelines

# Key Environmental Concepts *can be incorporated to improve the DMP*

1. A net environmental benefit analysis (NEBA) will reveal environmental advantages to retaining most existing structures.
  - Pilings, docks and boathouses create habitat and enhances biodiversity.
  - Climate change challenges will have us welcome shade in exposed intertidal locations.
  - Avoidance of unintended consequences
2. A holistic approach identifying key environmental stressors and response priorities
3. Management approaches must be specific to the habitat and the biota being managed
4. Incorporate creative environmental solutions and mitigative strategies that includes offsets (e.g. adding and enhancing habitat).
5. Over-reliance on the “precautionary principle” will result in unnecessary and overly restrictive requirements



*Solution: Site Specific DMP Requirements and a full evaluation of the implications.*

# Unintended Environmental Consequences *of the proposed DMP*

1. A full life-cycle approach to existing structures will significantly reduce the unintended consequences
2. A sudden influx of non-compliant docks, boathouses and marinas will create an unmanageable disposal and waste issue and additionally result in derelict boats, docks and boathouses anchoring.
3. Docks provide habitat, their loss is a loss of significant plant and animal assemblages.
4. Restricting docks and boathouses will lead to increased anchor scour and vessel grounding
5. An unintended increase in the use of plastics in new dock and boathouse construction

*Solution: Longer tenures (grandfathering)*



Derelict Marina vacated years ago  
and breaking apart



Derelict Boats, docks, and  
boathouses



“The Dock Crusher” in 2023 sent otherwise viable materials for disposal after the “Red Zone Dock Removal” [REP](#)

# DMP: Engineering Overview

Best management engineering practices must be based on sound scientific data. The DMP fails to meet this standard.

- **Safety concerns** with float width and area limitations.
- **Stability concerns** of environmental factors such as wind, buoyancy and currents.
- **Floatation concerns** under the current DMP 43% light transparency criteria.
- **Flexibility concerns** on how the current DMP impacts commercial docks and marinas.
- **Environmental and Archaeological concerns** resulting from removal, remediation and new construction efforts necessary for DMP compliance.
- **Complexity and Feasibility concerns** on site-specific factors being overlooked.
- **Timing and Financial concerns** with compliance due to short tenures and approval uncertainty.
- **Socio-Economic concerns** for the region, absent of any economic feasibility study.
- **Disposal concerns.**



# DMP: Light Transparency Considerations

1. Floating structures will require substantial reduction in structural components to meet the 43% criteria.
2. Billets and structure alone on a medium duty timber float will allow roughly ~37% light transmission before any decking is applied.
3. Reducing the structure forces an increase in the coverage area of the billets to compensate, therefore further decreasing the available light penetration.
4. Lighter duty floats will have lower survivability during weather events increasing potential hazards to the natural environment.
5. Docks in a deep water areas protected by high bank waterfront may see little to no light throughout the day, regardless of transmissive materials used.



# DMP: Costs of Compliance

Environmental costs related to retrofitting existing docks in the shíshálh swiya:

1. Spud barges, cranes, work boats, and other related equipment and personnel operating in excess of **45,000 hours** to bring the region into compliance.
2. Heavy equipment moving around the region disturbing established ecosystems by resetting or removing pilings, chains, and anchor blocks.
3. Prevalent sound pollution due to construction and remediation activities.
4. Installation of temporary moorage systems to handle displaced vessels, or equipment barges during construction activities.
5. Carbon footprint of the travel to and from the region for the workers, vehicles, barges, supplies and equipment.





# Financial and Socio-Economic Concerns

**Financial Impact:** The proposed DMP would result in significant financial burdens for individual homeowners and small businesses, including reduction in property values and removal or remediation of existing docks, boathouses and related structures.

Based on preliminary analysis, individual homeowners would collectively bare an estimated \$500 million in costs. With impacts on tourism, commercial activities, industry and small businesses this figure could reach upwards of \$1 billion.

## ***The DMP: Expropriation without Compensation***

**Socio-Economic Impact:** The labour force of the region relies on tourism, construction, and retail services as significant sources of employment. The reduction of employment opportunities in these industries would negatively affect cost of living and contribute to a reduction in population, further retracting the local economy.

Over a third of the population in this region is over 65, typically living on fixed income, and not participating in the labour force. The loss of young workers and their families due to economic changes would have a devastating effect.

# WPC Recommendations



The WPC Science Committee comprises biologists, zoologists, engineers (including maritime), environmental scientists, and professionals specializing in dock and marine construction. This group compiled a selection of suggested approaches and modifications to the DMP. This list is not exhaustive but serves as a starting point.

Concerns	Unintended consequence of the DMP	WPC Suggested Solution	Community Solutions
<b>Longer Tenures</b> <i>(Grandfathering)</i>	Anchoring and derelict docks and boathouses Environmental Waste Habitat destruction Socio-Economic & Financial impacts	Permit existing structures to ensure full life cycle and avoid unnecessary disposal pressures and waste.	Grant programs and community education to promote upgrades.
<b>Size restrictions</b>	Anchoring and derelict docks and boathouses Socio-Economic & Financial impacts Unintended waste Unsafe Widths	Site-specific considerations based on location and number and type of vessels being moored.	Additional Marina approvals.
<b>Shading of Docks</b>	Climate change considerations, loss of shading Financial impacts/waste	Site-specific solutions for new construction where appropriate, such as grating and LED lighting.	Offset program (eelgrass seeding)
<b>Zones</b>	The creation of zones with no scientific basis Access issues for private property owners	Net environmental benefit analysis: environmental mitigation strategies in sensitive areas.	Transparency
<b>Anchoring</b>	Bottom scouring Increased noise pollution Navigational hazards	Permit larger docks, boathouses and marinas to accommodate vessel moorage requirements.	
<b>Harvesting</b>	Neglecting identified causes of shellfish closures	Focus on septic and commercial fishing mitigation strategies to ensure a holistic approach.	Offset Programs Infrastructure upgrades
<b>Grounding</b>	Docks moving further into navigable channels	Allow site-specific exceptions based on topography.	
<b>Building Material</b>	Creation of waste with remediation activities (styrofoam, creosote)	New construction utilizing steel or concrete pilings and encapsulated foam building materials.	