

90 Years of Dam Safety: The Need for Modernization and HB 2085

OREGON



WATER RESOURCES
DEPARTMENT

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- Why a Dam Safety Program
- Overview of Current Dam Safety Laws and Program
- HB 2085 and Current Law
- Amendments and Next Steps
- Questions and Feedback



Why does Oregon have a Dam Safety program?

- Water storage is essential to meeting water needs
 - Drinking water, agriculture, recreation, & other uses
 - Supply during summer and droughts
 - More critical with climate change



Why does Oregon have a Dam Safety program?

- Consequence of dam failure can be high
 - Risk to lives, property, and infrastructure
- Maintenance and safe operation
 - Necessary to keep benefits and prevent failures



Factors in Dam Failure

- Lack of Maintenance
- Deterioration
- Design or Construction flaw
- Spillway failure
- Misoperation
- Landslide
- Floods
- Earthquakes



Dam Safety Program




- Primarily in ORS 540.340 to 540.400
 - 1929 - life and property
 - 10 feet high and 3+ million gallons
 - Inspect dams and require repairs for safety
 - Review designs for new dams and significant modifications

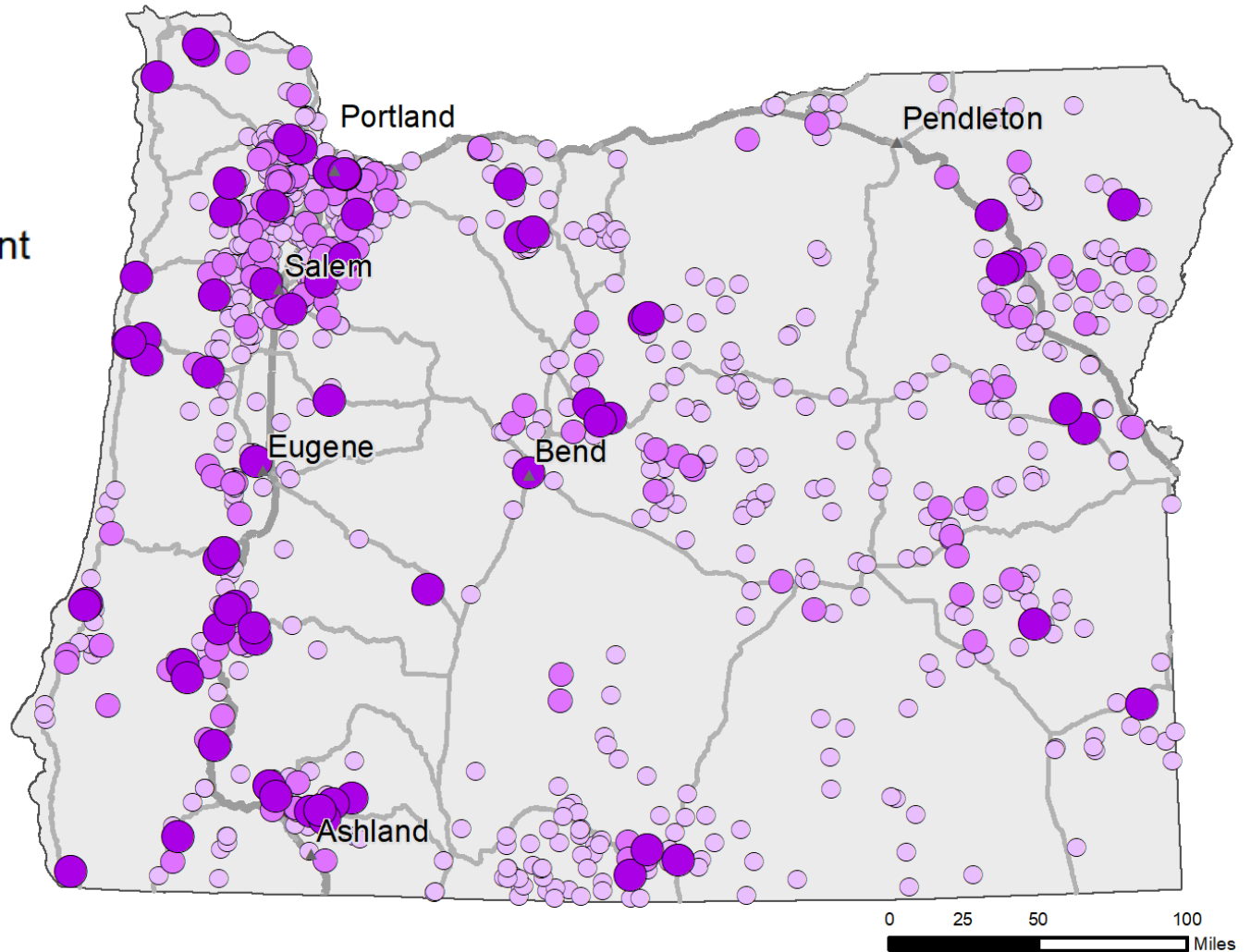




State-Regulated Dams

Legend

-  State, High
-  State, Significant
-  State, Low



State Regulated Dams

# of High Hazard Dams by Condition Rating	
<i>Satisfactory</i>	31
<i>Fair</i>	25
<i>Poor</i>	10
<i>Unsatisfactory</i>	7
<i>Under Analysis</i>	2
# of High Hazard Dams	75
# of Significant Hazard Dams	149
# of Low Hazard Dams	729
Total # of State-Regulated Dams	953

Need for Modernization

In past 90 years, advances in:

- Designing dams
- Understanding of floods and earthquakes
- Best practices in policy: Model State Dam Safety Program
- Few changes to statutes: policy gaps
- 2017 Integrated Water Resources Strategy: 10 recommendations



Oregon's **2017**
Integrated Water Resources Strategy

Need for Modernization

- Sought feedback from stakeholders
- Ensure safety and minimize risk to lives, property and infrastructure throughout the life of the dam, while balancing the owners' need for water:
 - Construction
 - Modifications
 - Maintenance
 - Repairs / Rehab
 - Removal
 - Emergency

HB 2085 - Overview

- Repeals the current laws; as a result many existing authorities appear as new language
- Jurisdiction – Non-federally regulated dams: water and wastewater
- Approval of modifications and receipt of final engineering documentation
- Fee for reviews of plans for dams
- Guidance for owners on their responsibilities

HB 2085 - Overview

- Approval of removals to protect people and property
- Provide tools to work with owners and improve the safety of dams to protect the people, property, and infrastructure
 - Improve process for maintenance and safety issues, including flood and seismic
- Clarify the WRD's general authorities and actions may take during a dam failure
- Civil penalty authority for certain violations of dam safety statutes
- Effective 91st day; Operative date July 1, 2020.

Amendments

- Section 2 – Add definition of dam
- All sections – Change infrastructure to public infrastructure
- Section 5 – Clarify that if they do need a water right, this section does not authorize to impound without one
- Section 6 – Removals – Does not require WRD to approve the plan, but can require owner to modify the plan/hire engineer if approach is not safe.

Amendments

- Section 8 – Deletes section 16 and adds ability for neighbor to request to section 8
- Sections 9 and 12 – Implies that a final order could only be issued by default.
- Section 20(2)(c) – Rulemaking: WRD will set standards for the dam, specs, plans, designs, etc.

Additional Amendments

Discussing additional amendments:

- Modify the emergency response section
- Believes->determine
- Civil penalty incorrect section references
- Likely others as we continue to refine with feedback



Conclusion

- Repeal and replace: See table to use as a tool
- Additional slides detail sections
- Open to feedback; will need amendments



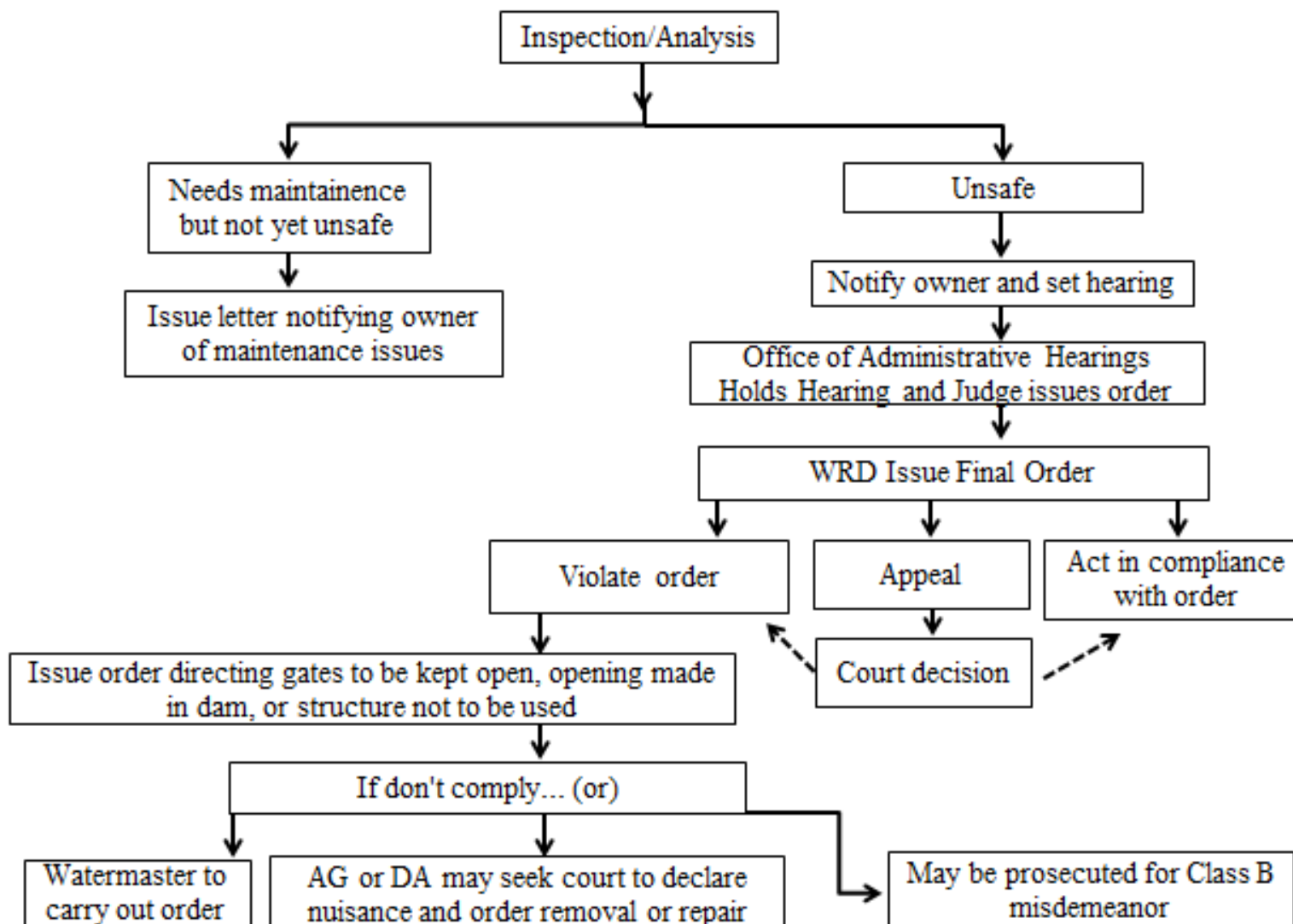
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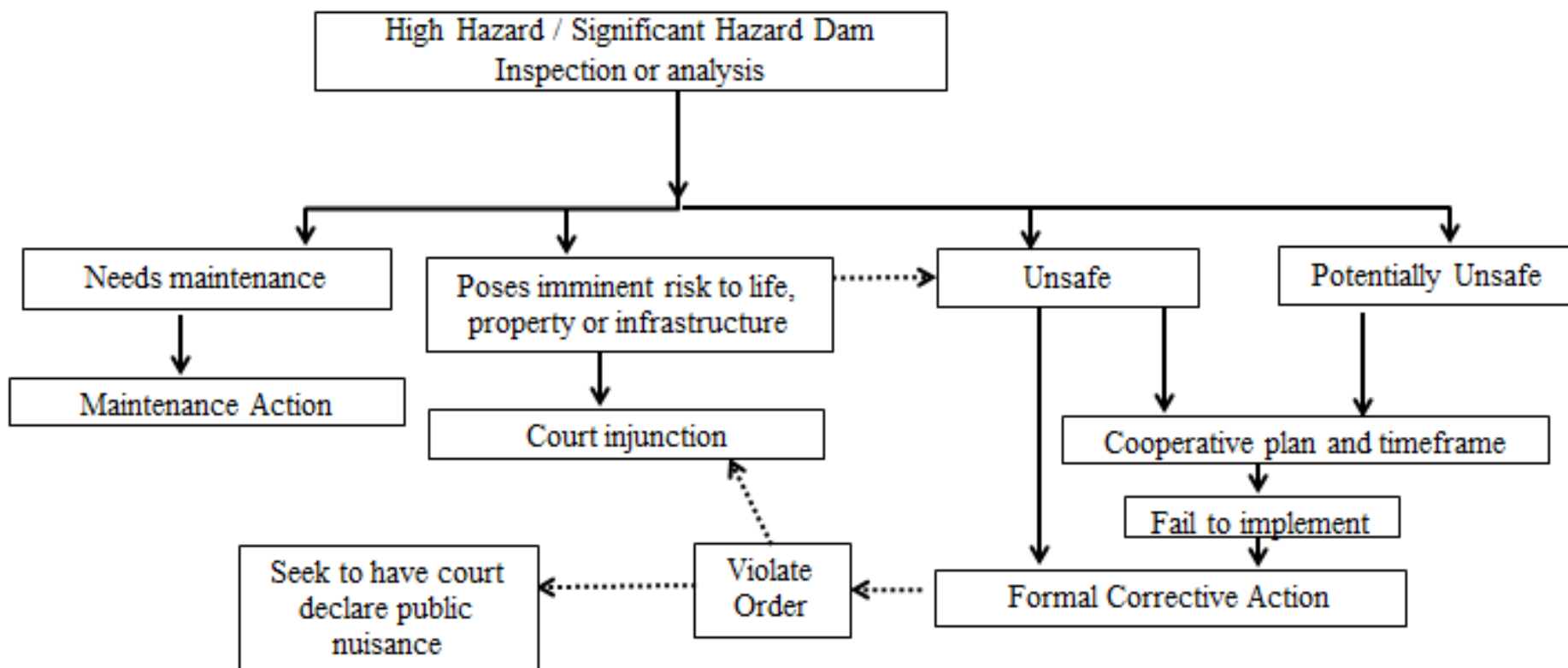
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Current Corrective Action Process in Statute

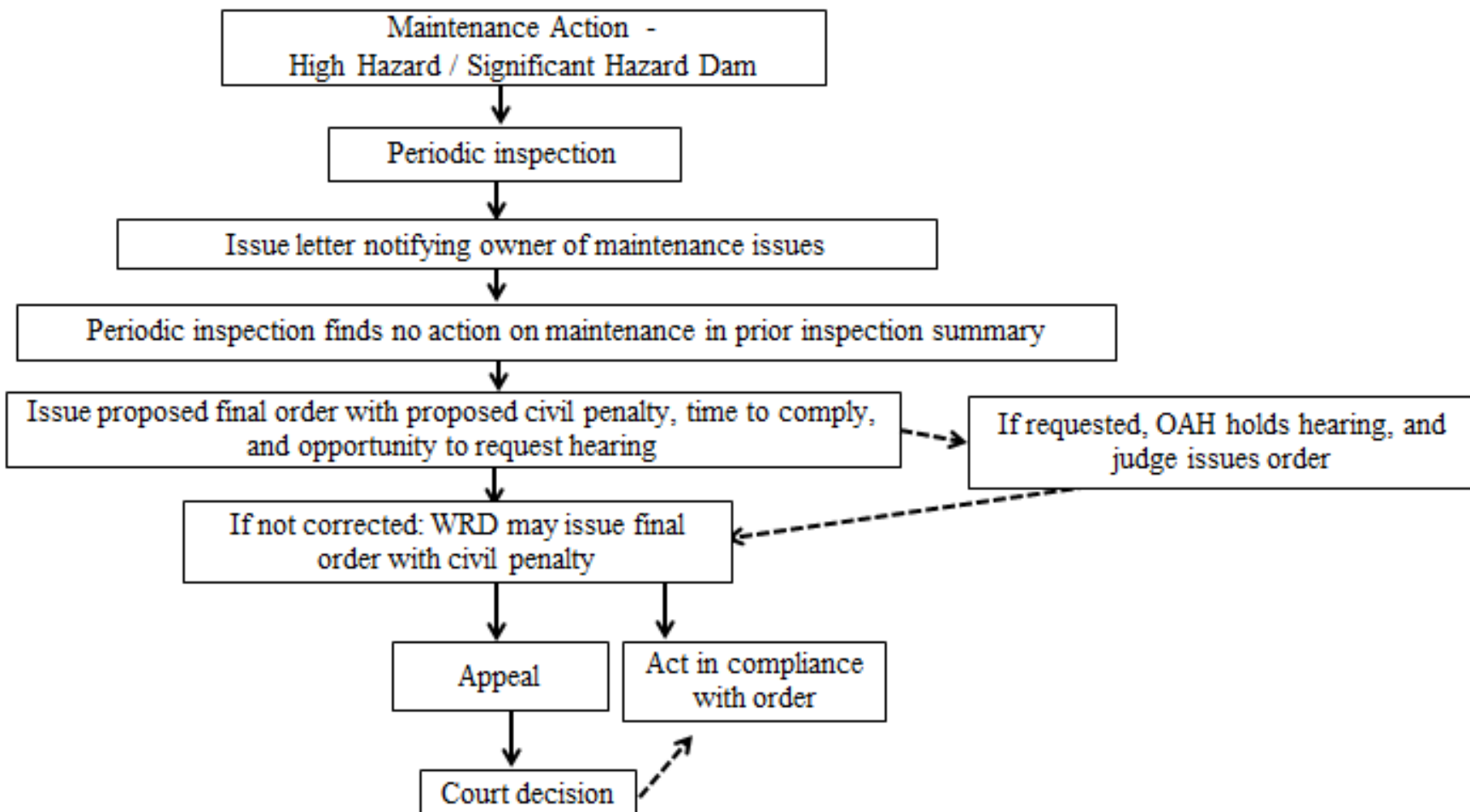


Overview of Proposed Tools in HB 2085 to Ensure Safety



For any action, at any time may: Informally resolve through settlement, stipulation, consent order, etc.

HB 2085 Maintenance Action



HB 2085 Formal Corrective Action

