



# Beaver Management Planning

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A REVIEW OF EXISTING PLANS AND PROGRAMS WITH  
RECOMMENDED BEST MANAGEMENT PRACTICES



## WHERE CAN I FIND THE PLANNING REPORT?

The report is posted to National Wildlife Federation's reports website:

<https://www.nwf.org/Educational-Resources/Reports/2025/Beaver-Management-Planning>

# STAKEHOLDERS

A topographic map with yellow contour lines on a white background, showing various elevation levels and geographical features like a peak marked with a cross and a square marker.

Referenced a lot in the report, this is only a starting list:

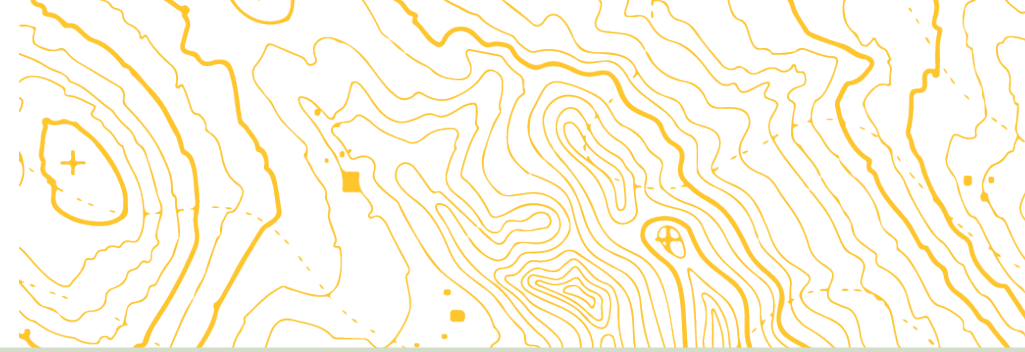
- **State agencies: wildlife, agriculture, water resources, transportation**
- **Local government and groups: city or county parks, water utilities, streets**
- **Tribal agencies and communities: wildlife, climate, agriculture**
- **Federal agencies: USFS, USFWS, BOR, BLM, NPS, NOAA, APHIS**
- **Agriculture and private landowners**
- **Recreation community: hunters, trappers, anglers**
- **Universities and researchers**
- **Non-profits and non-governmental organizations**

# WHAT IS A BEAVER MANAGEMENT PLAN?

- No solitary definition or pathway
- Traditionally focus on furbearer management
- **Newer emphasis on restoration potential**
- Manages human-beaver conflicts
- Balanced and complementary management of beavers as a restoration agent, nuisance, and furbearer



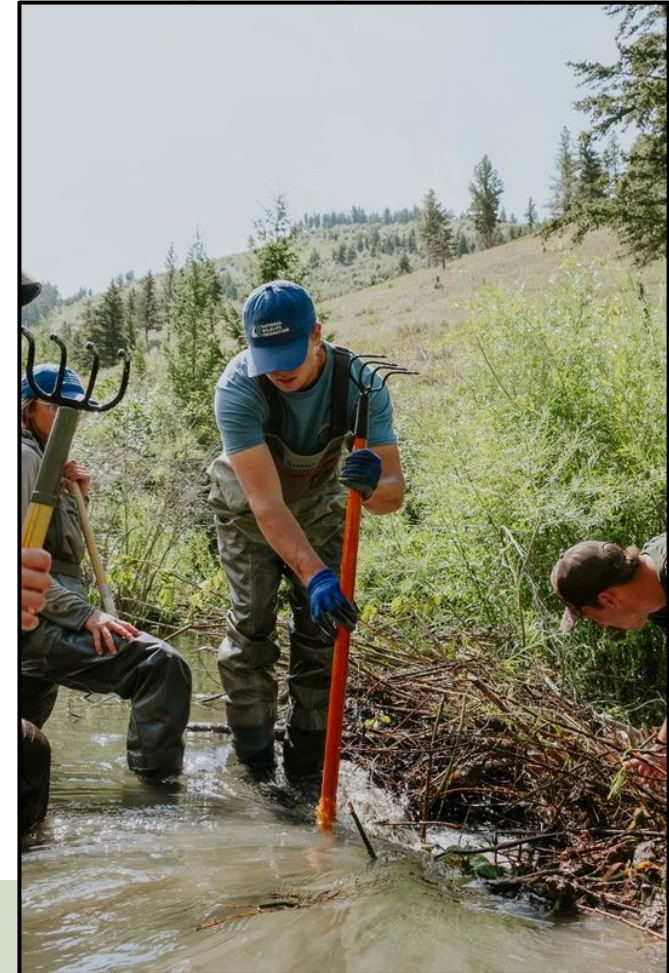
# BEAVER RESTORATION VS. BEAVER-LED RESTORATION



- Beaver restoration: sustaining or growing current beaver populations
- Beaver-led restoration: emphasis on beaver dam-building activities and wetlands providing ecosystem services
  - Not all beavers build dams
- Remember that habitat is degraded for beavers, too
- Focus on restoring beaver habitat - accomplishes both goals!
- Important to communicate this distinction early, clearly, and often
- Different goals may require different agency and stakeholder involvement

## WHAT DO ROBUST PLANS INCLUDE?

- Education and communication plans
  - Often assumed, but unfunded
- Conflict resolution programs
- Decision matrices
- Goals with timelines and funding sources
- Mechanisms for measuring success
- Research for data gaps
- Identification of legal pathways
- Pilot programs



*Photo credit Tanner Saul, National Wildlife Federation*

# GOAL SETTING

- Framing and foundation can take several years (action plan)
- Information/data sharing and gathering
- Goal setting should consider:
  - Time: 2, 3, 5, 10-year plans?
  - Scale: statewide vs. watershed
  - Funding: how much, and over what timeframe
  - Staffing: full-time, part-time, volunteers, partners
  - Achievability: based on what you have, what can you do? What may be outside of our control?

## The Beaver Restoration Guidebook

*Working with Beaver to Restore Streams, Wetlands, and Floodplains*

Version 2.02, March 23, 2023



Photo credit: Worth A Dam Foundation (martinezbeavers.org)

*Prepared by*

US Fish and Wildlife Service  
National Oceanic and Atmospheric Administration  
University of Saskatchewan  
US Forest Service  
Woodruff

Janine Castro  
Michael Pollock and Chris Jordan  
Gregory Lewallen  
Kent

*Funded by*

North Pacific Landscape Conservation Cooperative



Version 2.02. Get the latest version at: <https://www.fws.gov/media/beaver-restoration-guidebook>

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*U.S. Fish & Wildlife Service, "The Beaver Restoration Guidebook"*

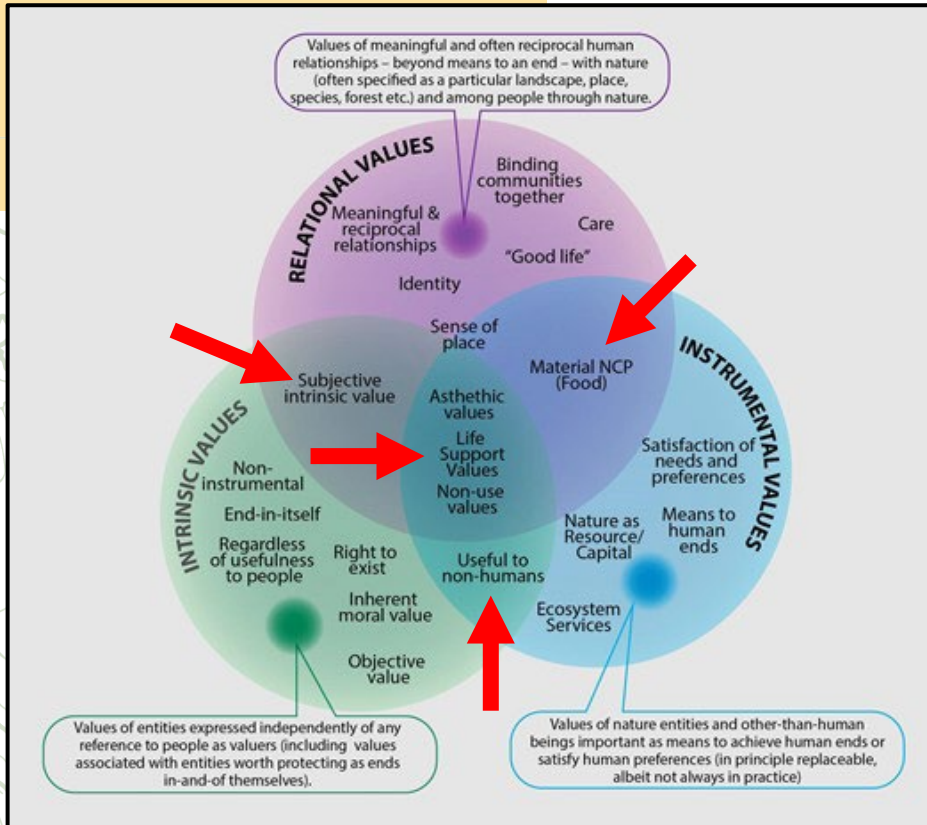
## WHY ARE BEAVERS BENEFICIAL?

- You know! But does everyone else?
- The question for many stakeholders isn't "if," but at what location, cost (conflict), and timeline
- Science and data may not always be the most salient talking point
  - Understanding and effectively communicating the limitations and parameters of study results
- Solving conflict is a powerful motivator and benefits beavers and humans



*Photo credit Tanner Saul, National Wildlife Federation*

# VALUES-BASED FRAMEWORK

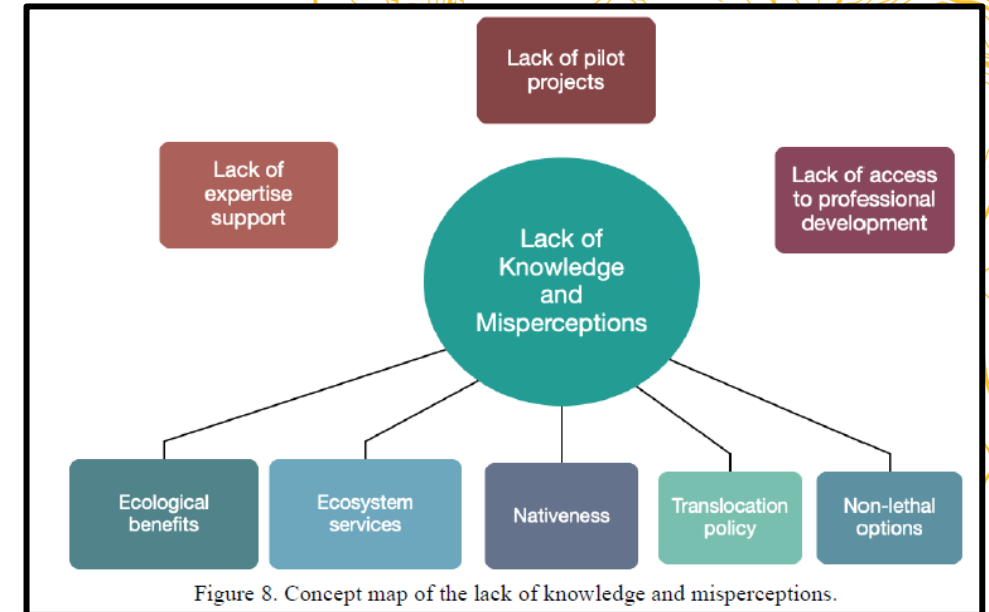


- People think differently!
- Important to involve all stakeholders
- Facilitate dialogue, improve restoration outcomes, and resolve conflict
- Three general value types: relational, intrinsic, and instrumental
- Types can converge, overlap, or have “fuzzy boundaries”
- Overlapping value types are a good starting point to build support for a plan
- Builds responsibility, accountability, trust

*[Why nature matters: A systematic review of intrinsic, instrumental, and relational values](#)*

# IDENTIFYING BARRIERS

1. Human dimensional barriers
2. Impacts on nonparticipating landowners
3. Liability
4. Institutional issues
5. Political barriers
6. Financial barriers
7. Lack of knowledge or misperceptions
8. Ecological barriers
9. Lack of organized influence

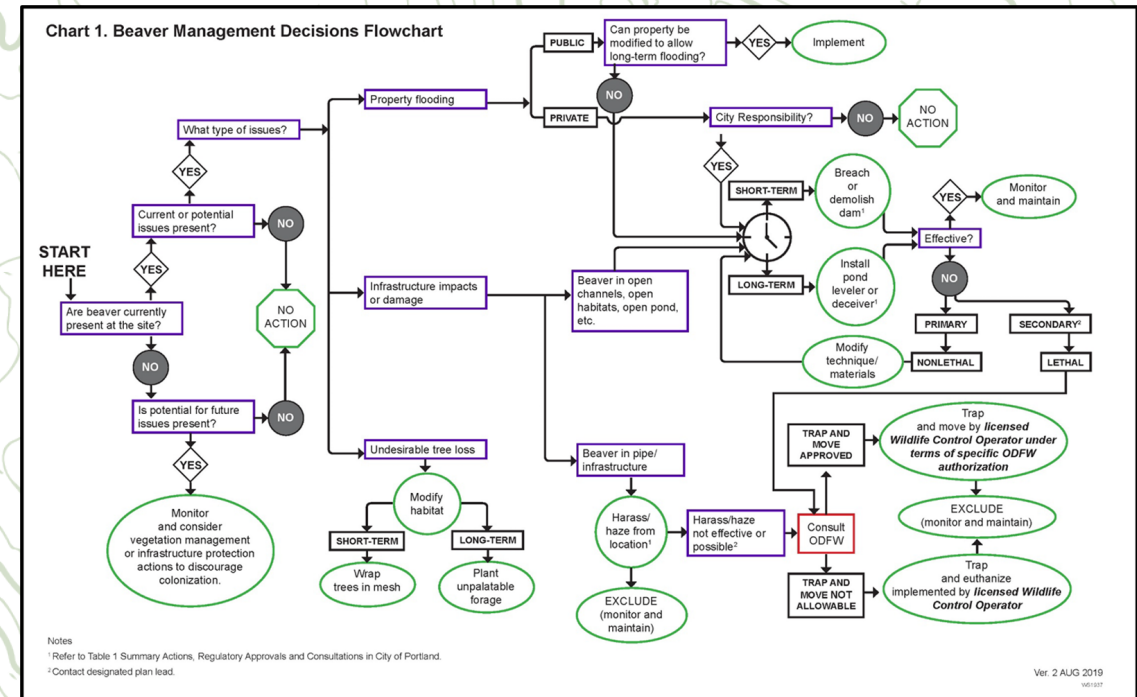


Lack of knowledge and uncertainty was a theme.

[\*Beaver translocation for ecosystem health and restoration. uncovering barriers to policy change in California\*](#)

# DECISION MATRICES

- Noted in the report if a plan includes some type of decision matrix
- Starting point can be matrixing current pathways and identifying gaps
- Matrices can grow, and there can be more than one matrix
- Very helpful for communication and creating consistent responses



*City of Portland, Oregon, Bureau of Environmental Services*

# CITY OF PORTLAND, OREGON, BUREAU OF ENVIRONMENTAL SERVICES

Chart 1. Beaver Management Decisions Flowchart

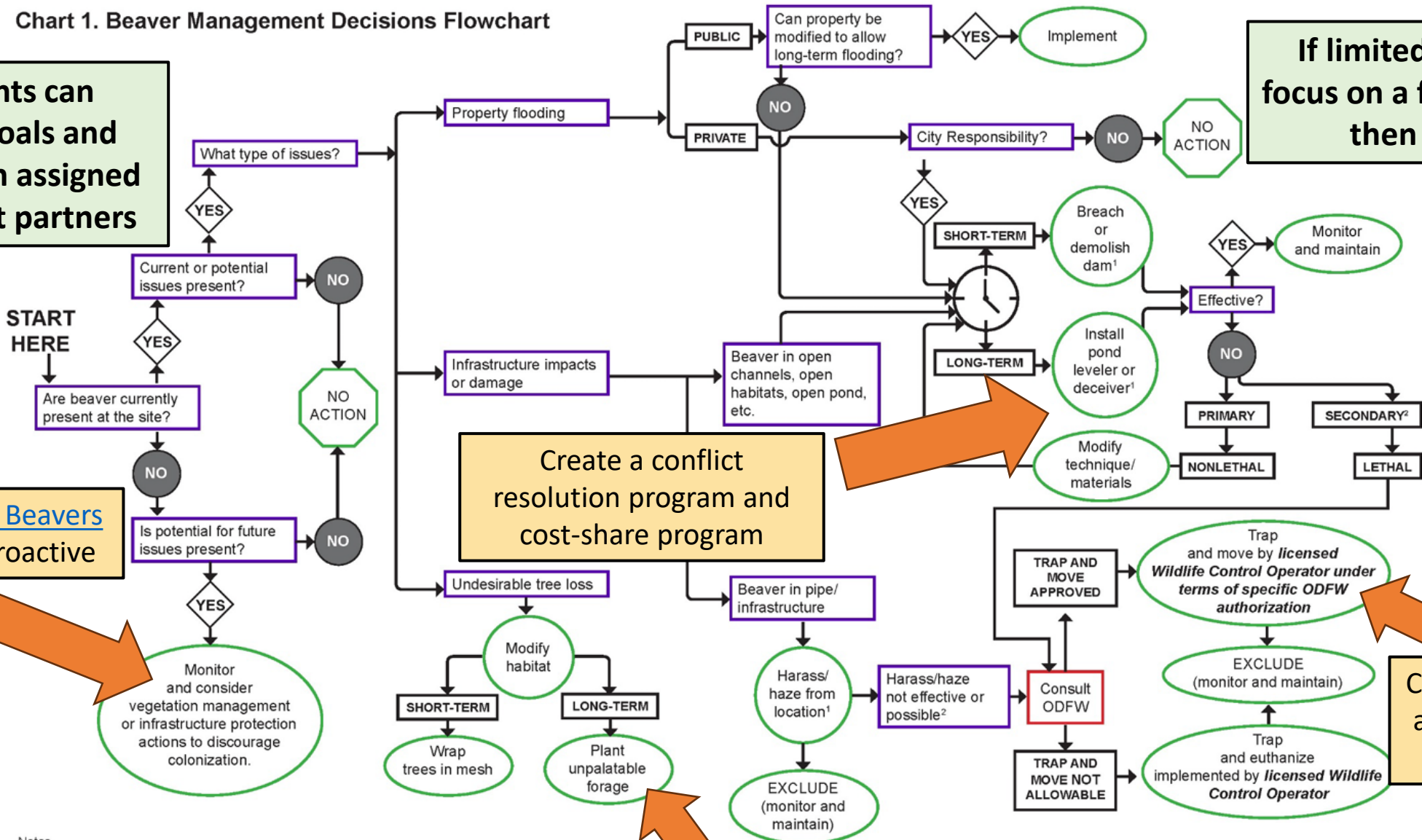
End points can identify goals and needs, then assigned to different partners

[Planning for Beavers Manual](#) – proactive

If limited resources, focus on a few branches, then expand

Create trapping and relocation protocols

Create a list of unpalatable and palatable forage



Notes  
 ¹ Refer to Table 1 Summary Actions, Regulatory Approvals and Consultations in City of Portland.  
 ² Contact designated plan lead.

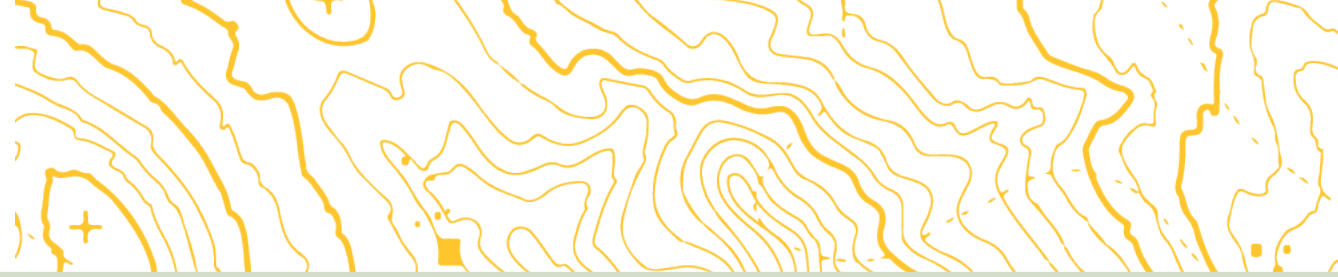


*Photo credit Tanner Saul, National Wildlife Federation*

## CONFLICT RESOLUTION

- Vital component of robust beaver management planning
- Gathering data on conflicts is a good goal, focuses limited resources
- Think of the target audience when designing outreach materials
  - Text-heavy manuals vs. pictures
  - Language availability
  - Location: online, print, phone calls, site visits
- It isn't always about developing something new – sometimes it is about marketing

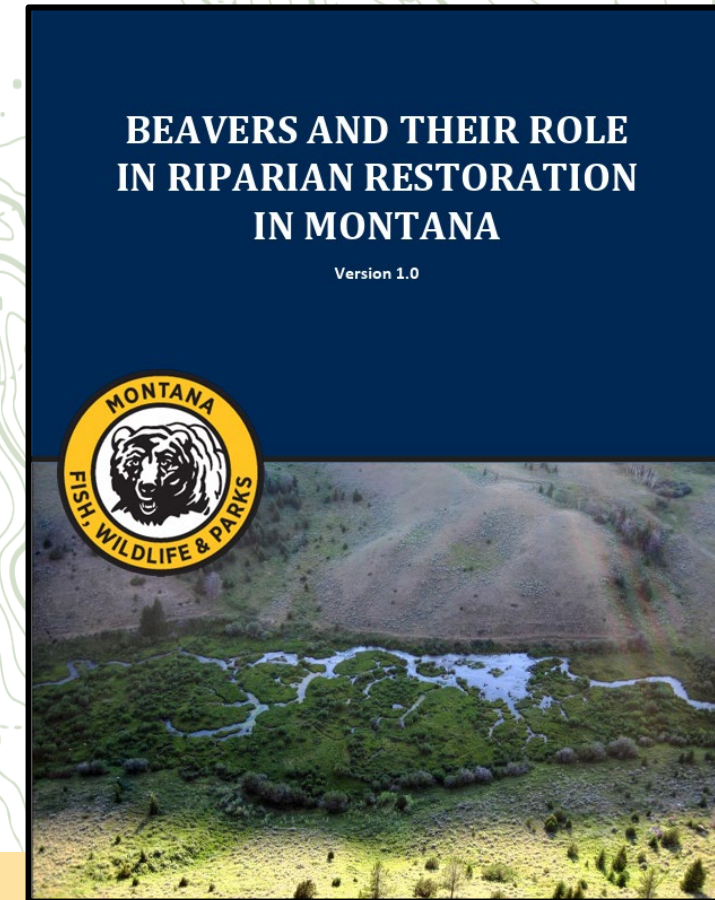
# PLANNING EXAMPLES



- Top-down vs. bottom-up approaches
  - Bottom-up approaches likely a reflection of grassroots work
  - Match the approach to goals, funding, resources
- Beaver working groups
- Action plans
- Local plans (watershed, city, county, etc.)
- Statewide/state plans
- Furbearer plans
- Review the history of each plan, many plans started as smaller steps
- Plans reviewed in report pages 32-50, includes hyperlinks

# Statewide plan: Montana

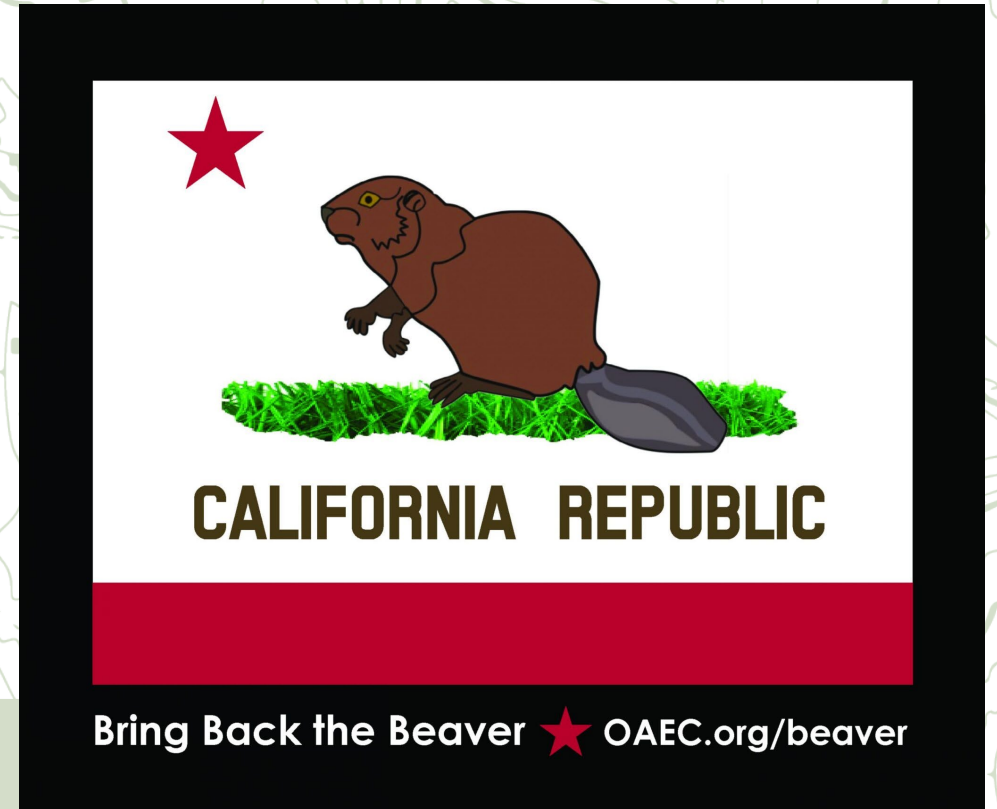
- No official state plan, voluntary
- Montana Beaver Working Group
- Action Plans
- Beaver Conflict Resolution Program
  - Partnership between NWF and Montana FWP
  - Training courses
  - Expansion of program into new areas, hiring technicians
- Extensive research and collaboration
  - [Beavers and Their Role in Riparian Restoration in Montana](#) (166 pages, led by MFWP)
  - Draft [Environmental Assessment, Montana Beaver Transplant Program](#) (114 pages, led by MFWP)



*[Beavers and Their Role in Riparian Restoration in Montana](#)*

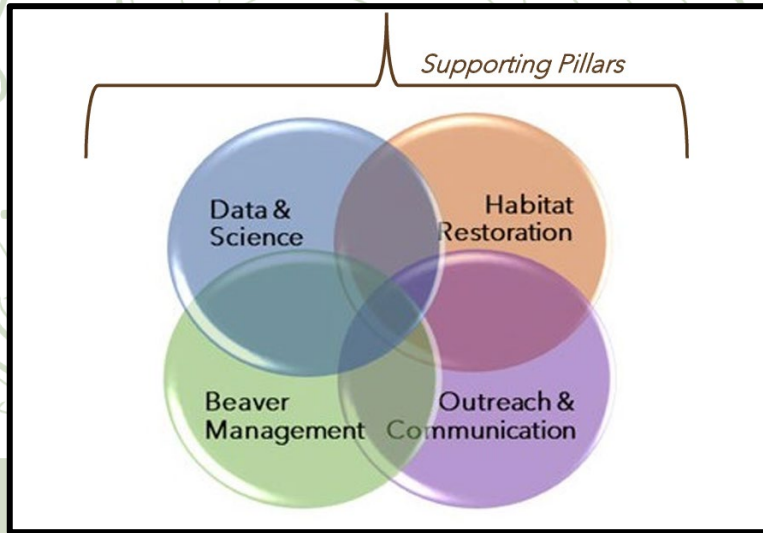
## State Plan: California

- Extensive groundwork by Occidental Arts & Ecology Center
- California Beaver Working Group
- Needed to establish historical presence, resulted in several white papers
- Extensive stakeholder engagement, particularly with agriculture
- Tribal partnership and collaboration
- Resulted in official state plan, conflict resolution program, and other resources



*Occidental Arts & Ecology Center Bring Back the Beaver  
Campaign Archives*

# State Action Plan: Oregon



Examples of goal planning from ODFW's 3-year Action Plan

Pillar	Core Action	Lead(s)	Completion Date
Pillar 2: Habitat Restoration	2C Fish Passage Rule Revision	Greg Apke	January 2023
Pillar 3: Beaver Management	3A Beaver Damage Complaint System & Non-Lethal, Coexistence Response	Furbearer Program PFA Bios Wildlife District Bios	January 2023 Ongoing
Pillar 1: Data & Science	1C <b>Beaver Emphasis Area</b> (HUC10) Selection	Adrienne Averett Watershed Managers	June 2023
Pillar 4: Outreach & Communication	4C Update ODFW's Living with Beaver Website Materials	Adrienne Averett	September 2023 Ongoing

- [3-year Action Plan 2022-2025](#), led by ODFW
- Defined words, goals, and strategies
- Identified leads by name
- Created Beaver Emphasis Areas (BEAs – HUC10s)
- Assigned completion dates
- Identified if there is funding and where that funding may come from
- City of Portland predates and expands on this action plan

# Local plan: King County, WA

- 2023, legislation introduced that required WDFW to develop and adopt a SBMP, but did not pass
- 2024, WDFW announced intention to prepare beaver habitat management guidelines, RFP went out with report due June 2025
- King County hosts an extensive program
  - Workshops and trainings
  - [Many technical papers](#)
  - [Planning for Beavers Manual](#)
  - [Summary matrix of beaver management tools](#)

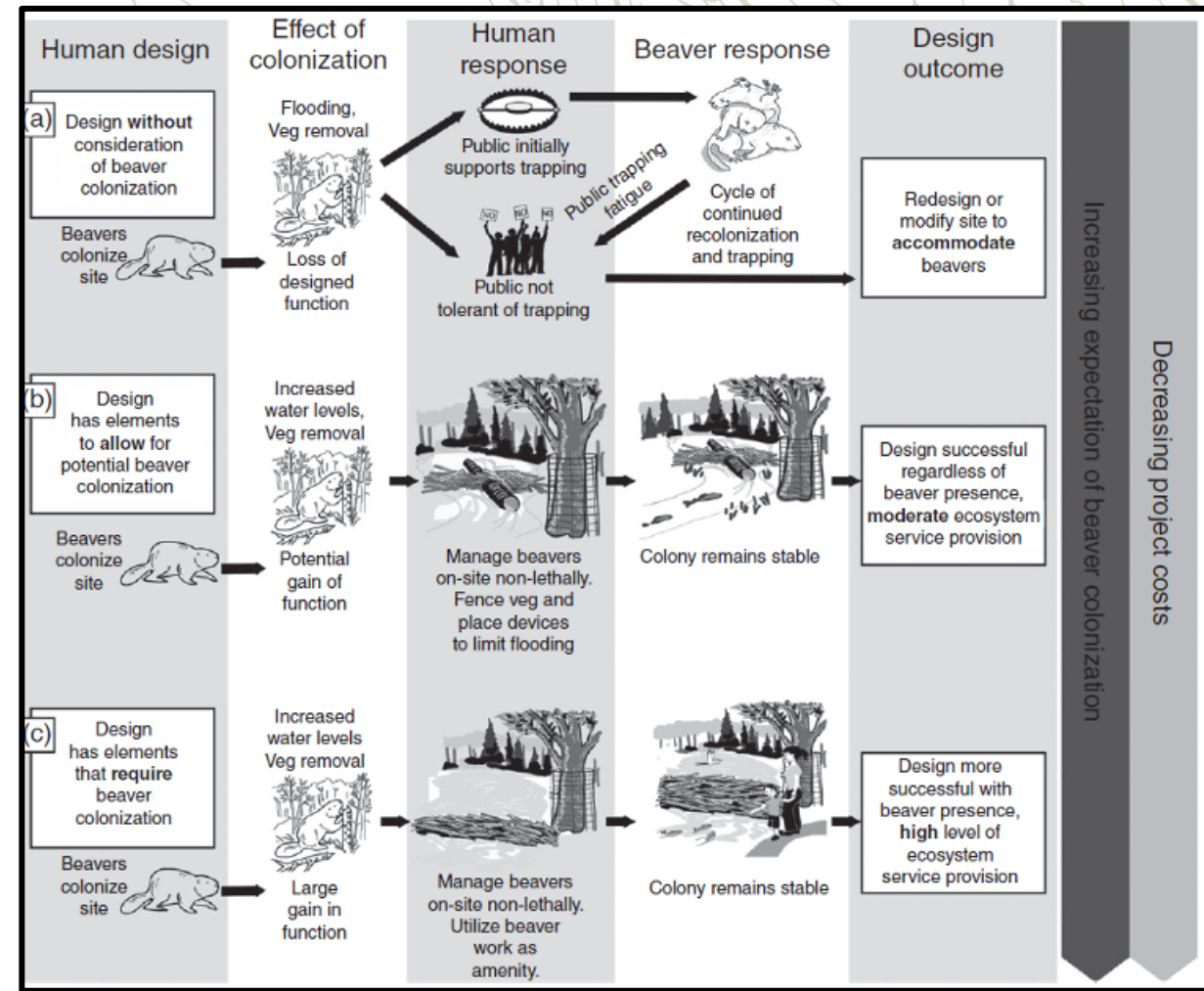
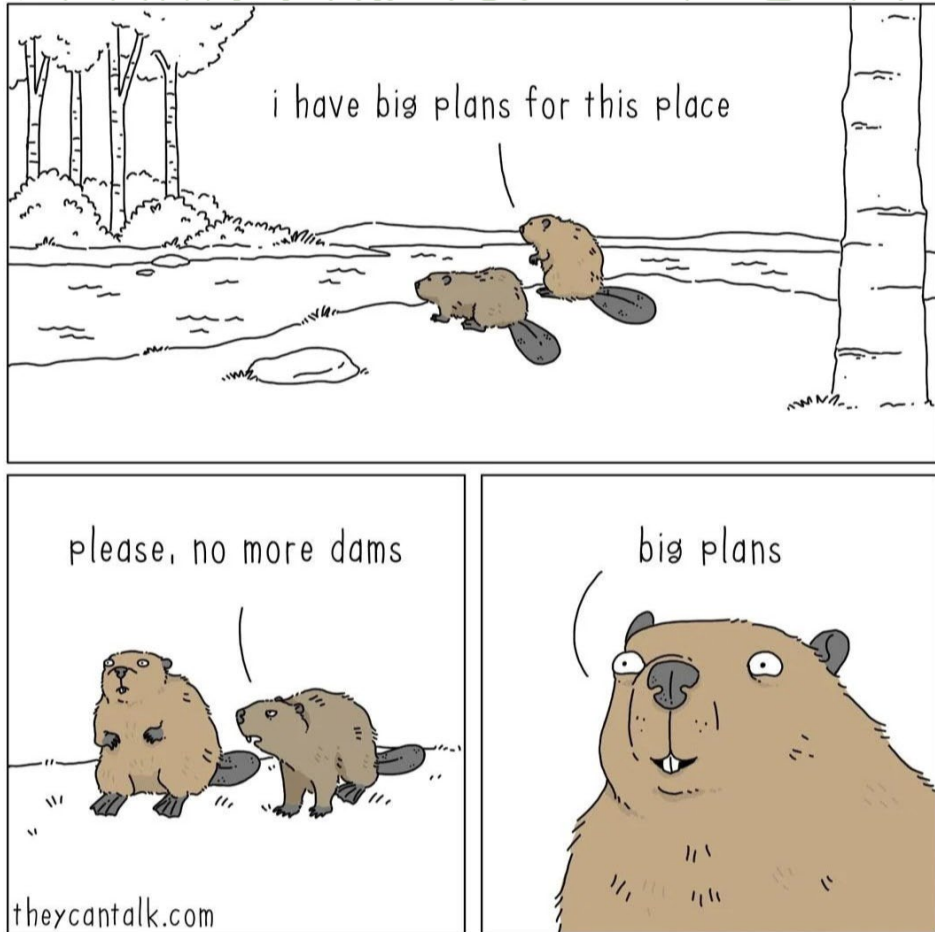


Figure from King County's [Planning for Beavers Manual](#)

## KEY TAKEAWAYS



- As much as we know, we don't know everything
- Partner with wildlife agency, address conflict, involve stakeholders
- “Successful beaver-related restoration projects require...partners who are willing to take risks, innovate, and stay committed. A regulatory environment that enables experimentation, flexibility, and adaptive management is also important.”  
[Ranchers, Beavers, and Stream Restoration on Western Rangelands](#)
- Beavers are living creatures with their own minds, focus on restoring habitat



Questions?  
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