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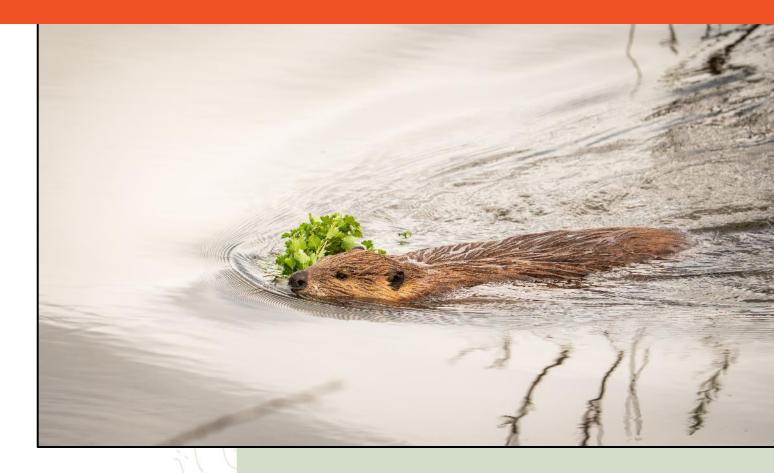
> > NAWM Webinar September 3, 2025

Beaver Management Planning:
A review of existing plans and programs with recommended best management practices



OUTLINE

- Beaver Management Report
 - Where to find it
 - Purpose + Goal
 - How to Use It
- Beaver management plans
 - Stakeholders
 - What are they
 - What do they look like
 - Goal setting
- Why focus on beavers?
- Human Dimensions
- Conflict Resolution





BEAVER MANAGEMENT REPORT







WHERE CAN I FIND IT?

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

https://www.nwf.org/Educational-Resources/Reports



PURPOSE + GOAL

- Purpose: to analyze and summarize existing approaches and review features, such as decision matrices
- Goal: provide approachable and realistic examples that elevate watershed restoration work via beaver conflict resolution and education
- NOT an exercise in ranking or grading
- Identified 8 BMPs that create a framework
- All plans/programs embody at least one BMP, but not all BMPs are embodied in every plan





HOW TO USE THIS REPORT

- At any point in the planning process, but the earlier, the better
- As a reference guide
- As an inspiration, and a reality check
 - Acknowledges the work that has been done in this space and the lessons learned
 - "Where the rubber meets the road"
 - To know what isn't possible, and what IS possible
- Audience is wide-reaching, some sections may not be as relevant
- Only a snapshot in time, there are many links and resources



BEAVER MANAGEMENT PLANS & PROGRAMS





STAKEHOLDERS



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 MANAGEMEMT PLAN?

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



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

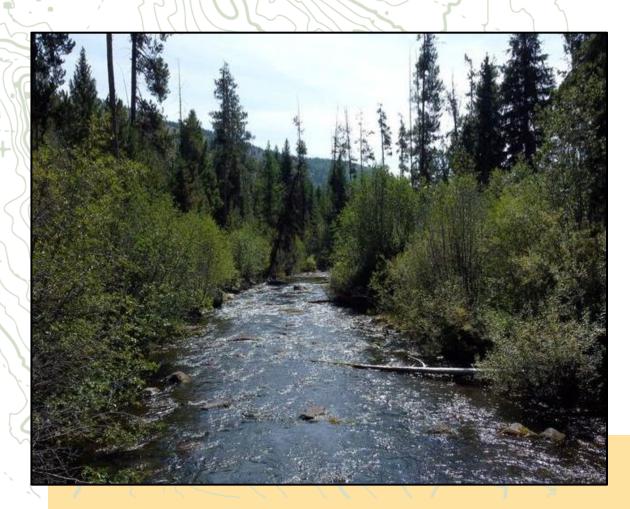
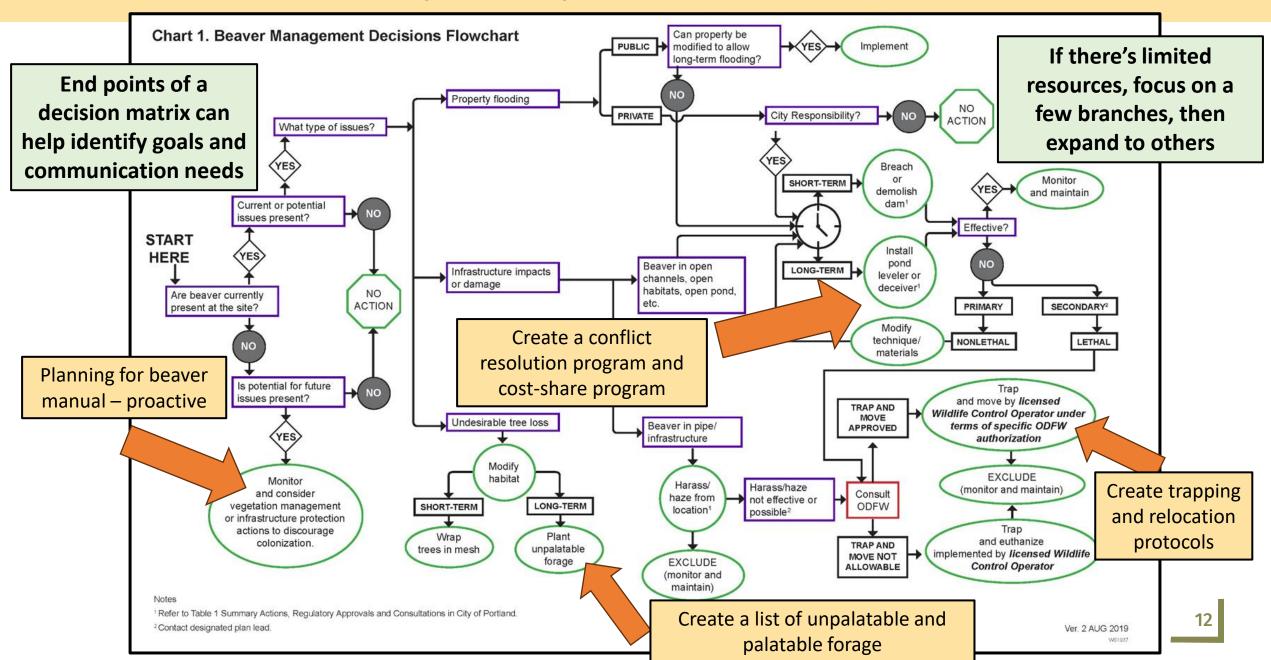


Photo credit Tanner Saul, National Wildlife Federation

GOAL SETTING

- Framing and foundation work can take several years and be the focus of an action plan
- Focus on information gathering
- Goal setting should consider:
 - Time: 2, 3, 5, 10 years?
 - 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?

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HUMAN DIMENSIONS







relationships - beyond means to an end - with nature (often specified as a particular landscape, place, pecies, forest etc.) and among people through nature Meaningful & reciprocal relations Binding communities together "Good life" Material NCP Non-instrumental End-in-its Regardler of usefuln End-in-itself Right to Capital Useful to non-humans Inherent Ecosystem Services moral value Values of nature entities and other-than-human Values of entities expressed independently of any beings important as means to achieve human ends or reference to people as valuers (including values satisfy human preferences (in principle replaceable, associated with entities worth protecting as ends albeit not always in practice) in-and-of themselves).

VALUES-BASED FRAMEWORK

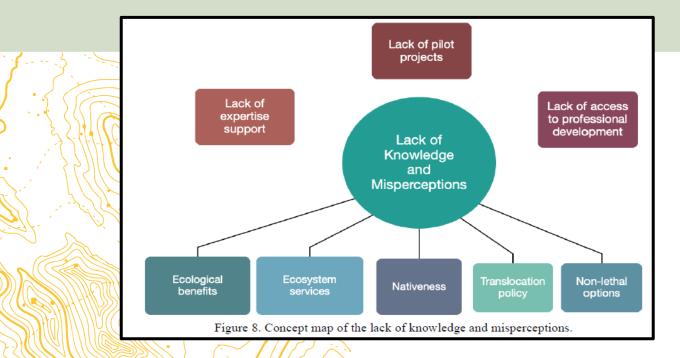
- People think differently!
- Important to involve all your stakeholders
- We want to facilitate dialogue, improve restoration outcomes, and resolve conflict
- Three general value types: relational, intrinsic, and instrumental
- Types can converge, overlap, or have "fuzzy boundaries"
- Overlapping value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

Why nature matters: A systematic review of intrinsic, instrumental, and relational values

IDENTIFYING AND OVERCOMING 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



WHY FOCUS ON BEAVERS? WHAT ABOUT CONFLICT?





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 this can keep beavers on the landscape...

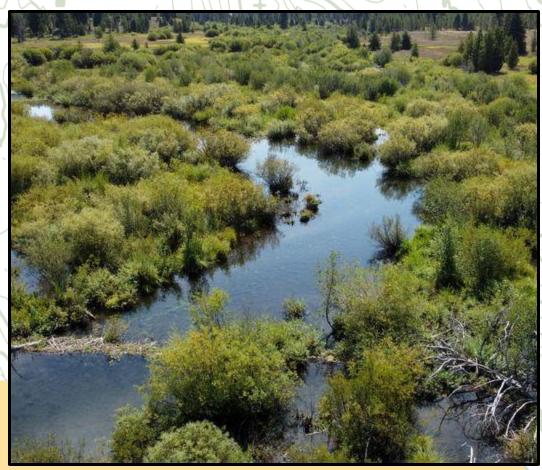


Photo credit Tanner Saul, National Wildlife Federation



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CONFLICT RESOLUTION

- Conflict resolution programs are a vital component of robust beaver management plans
- Gathering data on conflicts is a good goal, it can help focus limited resources
- Think of the target audience when designing 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



CHALLENGES

- As much as we know, we don't know everything
- "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
 - Beavers build dams to improve their lives, and beavers might not build dams
 - Focus on restoring beaver habitat