

Health Services Agency - Environmental Health

## Fish and Wildlife Advisory Commission



701 Ocean Street, Room 312, Santa Cruz, CA 95060 (831) 454-2022 TDD/TTY - Call **711** <u>http://www.scceh.org</u>

## AGENDA June 1, 2023, 7:00 PM

Commissioners will meet in person at **the Solarium Conference Room, at 1060 Emeline Avenue**. Members of the public can join in person but are encouraged to join virtually using the provided link.

PLEASE NOTE: The meeting room is on the second floor, above the Water Quality Lab entrance. The door must remain locked after hours, but staff will be able to see and provide access to all attendees as they arrive.

Agenda Item #	Start Time	End Time	Description
1	7:00	7:10	Call to Order
2			Roll Call
3			Approval of Minutes
4			Public comment for items not on the agenda
5	7:10	7:30	Invasive Species Letter Follow Up
6	7:30	8:00	Discuss Inter-Commission Coordination Items
7	8:00	8:40	Beaver Reintroductions Follow Up
8	8:40	8:45	Approval Of Workplan For 2023
9	8:45	9:00	Staff Reports
			Commissioner Reports and Announcements
10		9:00	Adjourn

### Public Comment

Jean Brocklebank: Providing additional information on AB 64

### **Items of Interest:**

<u>Resolution recognizing tobacco product waste as an environmental threat – Santa Cruz County</u> <u>CDFW News | Recreational Ocean, In-River Salmon Fisheries in California to Close for Remainder of 2023</u> <u>Bill Text - AB-64 Beaver restoration. (ca.gov)</u>

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs, or activities. This online meeting is available to anyone with a telephone. If you are a person with a disability and require special assistance in order to participate in the meeting, please contact Sean Abbey at (831) 454-2386 or TDD number (454-2123) at least 72 hours in advance of the meeting in order to make arrangements. Persons with disabilities may request a copy of the agenda in an alternative format. As a courtesy to those affected, please attend the meeting smoke and scent free.

## Microsoft Teams meeting

Join on your computer, mobile app or room device <u>Click here to join the meeting</u> Meeting ID: 279 291 752 117 Passcode: oiQCLC <u>Download Teams</u> | Join on the web **Or call in (audio only)** +1 831-454-2222,,755846848# United States, Salinas Phone Conference ID: 755 846 848# Find a local number | Reset PIN

**Click on the "Click here to join the meeting" link above.** If you are asked to join Teams with an application, click on "No thanks" and open in the browser. You should not need to download the application to join the meeting.

Please join the meeting a few minutes BEFORE 7:00 pm so that we can start at 7:00 pm. Staff will open the video conference at 6:50 pm. Cameras are optional for members of the public.

If you have questions, please contact Sean Abbey at <a href="mailto:sean.abbey@santacruzcounty.us">sean.abbey@santacruzcounty.us</a>.

### Meeting Roles and Rules:

Chris Berry, Chair, will lead the meeting. Chair Berry will announce each agenda item, identify who will be leading an item and introduce discussion and public comment periods.

Sean Abbey, staff, will assist with roll call, note taking, and tracking who wants to speak. Please allow time for staff to make notes about any decisions. Sean will monitor both email and text messages during the meeting.

There will be a public comment period for each item and the Chair will invite the public to participate at the appropriate time.



Fish and Wildlife Advisory Commission





## Meeting Minutes May 4, 2023

**1. CALL TO ORDER** – 7:00 pm

## 2. ROLL CALL

District	Commissioner	Status	Commissioner		Status
Ι	Chris Berry	Р	Samuel Adelson		Р
II	VACANT		David Somerton		Р
III	Liz Alter	Р	Jon Jankovitz		Р
IV	VACANT		VACANT		
V	Jenni Gomez	Р	Jen Michelsen		Р
		$\mathbf{P} = \mathbf{P}$	resent $R = Remote$	E = Excuse	ed $A = Abse$

## 3. APPROVAL OF MINUTES:

- Amendments from Com Berry: Anadromous Salmonid Habitat Conservation Plan, No longer on WAC so inter-commission coordination will be done by another person on the WAC, Suggest Del Crawford would be a public grants project, correct to "as" rather than has, grant should not be capitalized.
- Motion to Approve Minutes with amendments: Somerton, Second: Alter,
- Michelsen: Abstain, All Ayes: Minutes approved,

### 4. PUBLIC COMMENTS:

- Jean Brocklebank: Refers to County Code Sections <u>16.90</u> and <u>16.92</u>, which codified a "decade of environment". Believes that the county has not paid attention to that code since and asks for support from the FWAC to renew this section of code this year.
- 5. STATUS OF SIGNIFICANT TREE ORDINANCE: Staff confirmed with Planning that no update to Title 16 will be happening in the next 6 months. Staff and Com Gomez meet with Tatiana Brenan from OR3 to discuss joint effort to change the ordinance. OR3 is currently working on creating an oversight group to track progress by Depts on their CAAP objectives, including Sig Tree Ordinance changes. OR3 suggests coordination with Commission on the Environment, which has a workplan focused on the CAAP.
  - **Com Berry:** Will reach out to other commissions about restarting inter-commission coordination and include this topic, with potential assistance from Com Gomez.
  - Jean Brocklebank: Supports an extension of the ordinance.
- 6. DISCUSS 30X30 INITIATIVE: This effort intends to preserve 30% of land habitat and 30% of ocean habitat by 2030. The State has created parcel maps that land managers are being asked to report back how much of the property reaches the standard required to be considered "preserved" habitat". This has significant overlap with multiple work plan items.

- **Com Gomez:** County GIS systems could play a very helpful role in presenting this state data and providing a portal for users to report. County staff could be directed to create such a portal.
- **Com Alter:** Are any counties actively doing work? If there are not, Santa Cruz County could be model for others.
- **Com Jankovitz:** Are there any funding, or other incentives, to help land managers do this work?
- **Com Michelsen:** What are the criteria for being considered preserved habitat? How would the presence of invasive species impact the status of a preserved space?
- Staff: including a 30X30 initiative layer in the SCC GIS map would signal county support.
- **NEXT STEPS**: Com Alters workplan item on open space preservation has substantial overlap with this initiative and will work with Com Gomez to answer some of the questions commissioners have brought forward. To be brought again to a future meeting with additional suggestions for action items.
- 7. **DISCUSS POTENTIAL FOR BEAVER REINTRODUCTION:** The CA legislature currently has a bill, <u>AB 64</u>, that seeks to create a process for the CDFW to release beaver onto public and private lands. This would include developing criteria guide for release locations.
  - **Com Berry:** Was told during a Water Advisory Commission meeting that CDFW has a citation for beavers having been historically in San Lorenzo River. However, SLR might not be the best place for reintroduction due to human impacts on existing floodplains. That said, areas with beavers do have ways to cope with Beaver. AB 64 explicitly calls out 30x30, which suggests that the intention is to release beavers into larger, more pristine habitat. There seems to be momentum for beaver restoration. Will reach out to state parks and CDFW to get their feeling on the topic.
  - **Com Alter:** There is a question if beavers are already in our watersheds. There has been no eDNA discovered in water ways, but mummified beaver has been found and some potential roadkill sighted in local areas. There are also other nearby watersheds with Beavers. **Know a beaver expert at Cal Poly and will reach out about a potential presentation.**
  - **Com Jankovitz:** There is considerable research on the benefits of beavers to local habitats, including large benefits to coho salmon. However, there are significant challenges with human interface and flood control districts would need to have buy in to the concept. Worries that bad outcomes in a highly developed floodplain could lead to backlash against beaver. There would have to be good criteria for where beavers can be located. There could be some potential for watershed in less populated areas on North Coast, but beavers can be highly mobile and won't necessarily stay where they are desired.
  - Mark Strudley (*Pajaro Flood Control District*): Is supportive of the environmental benefits created by beaver activity. However, from a Flood Control Agency perspective, it is hard to see potential for flood protection created by beavers in urban areas. There is concern that AB 64 would allow CDFW to introduce beaver to public lands, including the new flood plains created by widened levees. Suggests that the bill should have careful language about where beavers should be reintroduced. Should the bill go through, the implementation guidance should include where the beavers should be considered.
  - Jean Brocklebank: Do not assume the idea is to release beaver everywhere. Do an inventory where beaver introduction would make sense. Suggests getting a presentation on where projects been successful. Do not give up on the idea because it will be difficult.
  - Michael Lewis: Find areas where beavers are now and extrapolate out where they could be in our area

- 8. 2023 WORKPLAN ITEMS: Commissioners reviewed the summary statements provided for each workplan item. Suggested revisions were provided to each commissioner. A suggestion for all statements was to include a reference to existing work on the topic, such as previous letters from FWAC. Commissioners will complete any revisions and resubmit. Final approval of workplan at next meeting.
- **9. APPROVAL OF APPRECIATION FOR SANDRA BARON:** Commissioners had no edits to the appreciation.
  - Motion to Approve Appreciation: Alter, Second: Michelson,
  - All Ayes: Appreciation approved to be sent to Supervisor Friend

### 10. STAFF AND COMMISSIONER REPORTS AND ANNOUNCEMENTS:

### • Staff Reports:

- Kristen Kittleson is retiring in July
- The steelhead surveys from 2022 showed generally low juvenile counts, especially in Soquel creek. Though counts were higher than 2021 and were fairly high in Zayante Creek. Com Gomez input the data into the <u>Steelhead Monitoring Data Explorer (sceeh.org)</u>

### • <u>Commissioner Reports:</u>

- **Com Gomez:** Doing <u>Snapshot Day</u> in San Lorenzo, Valley Women's club did a successful clean up at Lompico Pond and will do future clean ups on the last Saturday of every month.
- **Com Berry:** Will reach out to commission chairs about coordination meeting, ICCWG item on next agenda.
- **Com Adelson:** Will be giving a presentation on Wednesday, May 31, 5:30–6:30 p.m Floods: Ecological Impacts and the Resiliency of the San Lorenzo River.
- **11. ADJOURN. All Aye:** meeting adjourned at 9:00 pm.



**Fish and Wildlife Advisory Commission** 701 Ocean Street, Room 312, Santa Cruz, CA 95060



## 2023 Work Plan

## Public Grants Program

<u>Monitor</u> - Fish and Game Propagation Fund balance <u>Action</u> – Decide on fund amount and suggested request level for PGP in 2023

## Provide a forum for public input regarding fish and wildlife issues

<u>Learn</u> - about what community considers important fish and wildlife topics. <u>Action</u> – Be responsive to issues as they arise, report back to Board of Supervisors

## Coho salmon and steelhead recovery planning

### Lead Commissioner: Berry

<u>Learn</u> - current status and research; impacts of CZU fire. <u>Monitor</u> - low-flow fishing closure status and fishing regulation changes. <u>Monitor</u> - progress for new coho salmon conservation hatchery. <u>Action</u> – communicate with CDFW about fishing regulations.

## **Riparian Corridor Protection and Enhancement**

## Lead Commissioner: Jankovitz

<u>Monitor</u> - progress on County efforts to develop a Riparian Enhancement Program <u>Monitor</u> - how local agencies are dealing with homeless living in riparian areas. <u>Action</u> – support riparian corridor enhancement when appropriate <u>Action</u> – communicate importance of protecting riparian from homeless encampments for wildlife and water quality benefits.

## **Regional Conservation Investment Strategy (RCIS)**

# Includes conservation for wildlife, fish, riparian, oak woodlands, idea of strategic plan for fish and wildlife

Lead Commissioner: Michelsen

Learn - about RCIS process

Action – Discuss and comment to RCD/RTC on draft RCIS.

Action – Participate in public meetings.

Action – Consider letter to BOS re: RCIS comments

<u>Monitor</u> - development of final plan.



Health Services Agency 
Environmental Health

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## Expand Significant Tree Ordinance outside Coastal Zone

## Lead Commissioner: Gomez

<u>Action</u> – invite Rich Sampson to present on wildfire safety at March 2022 meeting and discuss Calfire perspective on expanding Significant Tree Ordinance.

## Wildlife Corridors and Open Space Conservation and Management

## Lead Commissioner: Alter

*Monitor* - Cotoni-Coast Dairies and San Vicente Redwoods public access process.

Learn - about Cotoni-Coast Dairies and San Vicente Redwoods forestry management.

Learn - about how conservation easements are being used in County.

Learn - about how much open space is in the County.

Learn - about how to support wildlife corridors.

## **Marine Protection**

## Lead Commissioners: Somerton

Learn - about new and ongoing marine protection issues.

what community considers important fish and wildlife topics.

Learn - about local juvenile great white sharks.

<u>Action -</u> take action when appropriate to support Marine Protection.

<u>Monitor -</u> new legislation and actions.

## Vision Santa Cruz Wild

## Lead Commissioners: Adelson

Action – Create a strategic plan for habitat and wildlife.

<u>Action</u> – develop ways to education county residents about local fish and wildlife issues. <u>Learn</u> - County General plan update is related to this item Date of Hearing: May 10, 2023

#### ASSEMBLY COMMITTEE ON APPROPRIATIONS Chris Holden, Chair AB 64 (Mathis) – As Amended April 13, 2023

Policy Committee:	Water, Parks and Wildlife	Vote:	15 - 0

#### SUMMARY:

Urgency: No

This bill requires the Department of Fish and Wildlife (DFW) to develop a program to promote beaver restoration.

State Mandated Local Program: Yes Reimbursable: No

Specifically, this bill, among other things:

- 1) Requires DFW, through consultation with beaver restoration program partners, as defined, to develop a program to promote beaver restoration across California.
- 2) Requires DFW, by January 1, 2025, to expand the program by (a) developing required training for the capture, handling, transport, and release of beavers on public and private lands, and (2) developing a licensing scheme that includes permits for the capture, handling, transport, and release of beavers. Provides that any costs imposed shall not exceed the reasonable costs to DFW for implementing and administering the licensing scheme.
- 3) Requires DFW to develop criteria to guide the release of beaver onto public or private lands and allows the release of beaver onto private lands only with written agreement from the landowner.
- 4) Authorizes DFW to partner with beaver restoration program partners for the purposes of providing required training and capturing, handling, or releasing beaver onto public lands.
- 5) Allows a private landowner to request DFW relocate a released beaver that has migrated naturally onto private property, and requires DFW to determine whether relocation is necessary and feasible in a timely manner.
- 6) Establishes a procedure for a landowner needing to remove, breach, or modify a beaver dam utilized by the relocated beaver, as provided, and authorizes DFW to deny a request for alteration.
- 7) Authorizes DFW to allow the release of beaver onto lands held by federally recognized Native American tribes or nonfederally recognized California Native American tribes included on the contact list maintained by the Native American Heritage Commission with a written agreement from the tribal government containing specified information.

### FISCAL EFFECT:

Costs of an unknown but potentially significant amount, possibly in the hundreds of thousands to low millions of dollars, for DFW to implement this bill (General Fund and special fund). As discussed below, DFW received funding in the fiscal year (FY) 2022-23 budget for its beaver restoration program. However, this bill expands the scope of DFW's beaver restoration efforts to, among other things, develop a training program for the capture, handling, transport, and release of beavers, develop regulations to create a licensing scheme and permitting process, and administer a permitting program that allows the translocation of beavers by non-DFW employees, which outside of a small number of captive propagation projects for listed species recovery, DFW does not do. While DFW may be able to recoup some of its costs via permitting fees, the department would almost certainly require additional funding to implement this bill.

### **COMMENTS**:

### Purpose and Background.

*Beavers.* The North American Beaver is considered a "keystone species." Beavers used to live in almost every stream in North America and had an estimated population of 100 million to 200 million. However, beavers were eliminated from much of their range by the late 1800s due to unregulated trapping and habitat loss, reducing their population to approximately 10 million to 15 million in North America today. As detailed in the Assembly Water, Parks, and Wildlife Committee analysis of this bill, beaver are native to California and provide ecological benefits by building dams and lodges that slow down streams and rivers, which improves water quality and controls water downstream, allows for groundwater recharge, repairs eroded channels, reconnects streams to their floodplains, and creates habitat for many plants and animals. Beavers create habitat complexity, significantly increase biodiversity, and can provide perennial flow to streams that would otherwise run dry. Through this process of ecosystem engineering, beavers can expand wetland, riparian, and wet meadow habitats and increase wildfire resiliency. Wildfire data from western states shows that beavers protect vegetation during wildfires.

There continues to be a longstanding policy of allowing landowners to receive depredation permits to kill beavers to protect land or property that is being or is in danger of being damaged or destroyed. A 2019 petition asked the Fish and Game Commission to address and improve beaver depredation practices, with a requirement to exhaust feasible non-lethal deterrence before killing and removing beavers and requiring DFW to consider impacts to listed species from issuance of a depredation permit. DFW is due to release related guidance soon.

**Ongoing Efforts at DFW.** This bill codifies elements of ongoing beaver restoration efforts at DFW, which received \$1.67 million for FY 2022-23 and \$1.44 million for FY 2023-24 and ongoing. In January 2023, DFW reported it is hiring five dedicated scientists to work on a comprehensive approach to beaver management. As part of this program, DFW plans to revise its internal policy guidance for beaver depredation permitting practices to better support human-beaver coexistence; develop a toolkit to help prevent property damage due to beaver activity and to foster co-existence with beaver; and conduct beaver translocations at the request of private and public entities, in collaboration with California's tribes, on DFW properties, and for CFW-initiated or DFW-supported collaborations. All approved translocation projects require DFW-veterinarian-approved capture plans, animal disease testing and quarantine, and DFW-approved translocation plans, which, per DFW's policy, require not only evaluation of habitat suitability, but also a variety of risk factors. DFW is initiating pilot translocation projects this summer.

Writing in a support-if-amended position, a coalition of environmental organizations that is collaborating as part of an informal California Beaver Policy Working Group state:

We have worked diligently and patiently for many years to improve California's approach to beaver management and as such we favor moving forward thoughtfully and in close coordination with the Department of Fish and Wildlife to develop the best practices and ground rules that will govern California's next chapter of beaver management.

While the groups support the provisions of the bill that codify the activities named in DFW's budget change proposal in the FY 2022-23 budget that established the aforementioned beaver restoration program, they outline numerous concerns with some of the other provisions in the bill. For example, they argue there should be consistency throughout the bill with respect to the authority, notice requirements, and other aspects of beaver relocation as they pertain to public and private lands, as there is no reason to treat relocation practices any differently. They also contend that some of the language in the bill contradicts current state law with respect to depredation and may conflict with forthcoming DFW policy that they hope will promote and support nonlethal coexistence.

Analysis Prepared by: Nikita Koraddi / APPR. / (916) 319-2081

From:	Jean Brocklebank
То:	Sean Abbey
Subject:	AB 64 The Beaver Bill
Date:	Saturday, May 6, 2023 12:32:02 PM
Attachments:	AB 64 (Mathis).pdf

### \*\*\*\*CAUTION: This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.\*\*\*\*

Hi Sean ~

FYI, a bit of my research on The Beaver Bill, which indeed is not well written. Use as you see fit for any exhibits for the FWAC.

Jean

### Support if amended argument

A coalition of 13 organizations collaborating as part of an informal California Beaver Policy Working Group writes with a "Support if Amended" position. Their letter highlights several positive elements of this bill, but also points out seven specific areas where the group would like to see further clarification. Some of the desired clarifications include: treating relocated beaver the same as naturally occurring beavers; not assuming that a released beaver will become a nuisance; including alternatives to dam alteration; ensuring landowners are knowledgeable about any necessary permits before relocation stranded fish; removing the potential criteria related to the age of relocated beaver; and stating that DFW has existing authority to capture, transport, and relocate beavers.

https://awpw.assembly.ca.gov/sites/awpw.assembly.ca.gov/files/AB%2064%20%28Mathis%2 9.pdf

Date of Hearing: April 24, 2023

### ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE Rebecca Bauer-Kahan, Chair AB 64 (Mathis) – As Amended April 13, 2023

SUBJECT: Beaver restoration

**SUMMARY**: Requires the Department of Fish and Wildlife (DFW) to, through consultation with beaver restoration program partners, develop a program to promote beaver restoration. Specifically, **this bill**:

- 1) Requires DFW, through consultation with beaver restoration program partners, as defined, to develop a program to promote beaver restoration across California by revising policies and guidelines relating to beavers, coordinating restoration efforts, proactively mitigating humanbeaver conflict, and relocating beavers into watersheds.
- 2) Requires DFW, no later than January 1, 2025, to expand the program by developing required training for the capture, handling, transport, and release of beavers on public and private lands; and a licensing scheme that includes the issuance and administration of permits for the capture, handling, transport, and release of beavers on public and private lands, except as specified.
- 3) Requires DFW to allow the release of beaver onto public lands or private lands, and requires for beaver released onto public lands that DFW require the notification of potentially affected, adjacent landowners in writing prior to the release of the beaver onto public lands.
- 4) Authorizes DFW to partner with beaver restoration program partners for the purposes of providing required training and capturing, handling, or releasing beaver onto public lands, as provided.
- 5) Allows a private landowner to request DFW relocate a released beaver that has migrated naturally onto private property, and requires DFW to determine whether relocation is necessary and feasible in a timely manner.
- 6) Requires DFW to only allow the release of beaver onto private lands with a written agreement from the landowner.
- 7) Establishes a procedure for a landowner needing to remove, breach, or modify a beaver dam utilized by the relocated beaver, as provided, and authorizes DFW to deny a request for alteration.
- 8) Authorizes DFW to allow the release of beaver onto lands held by federally recognized tribes or nonfederally recognized California Native American tribes included on the contact list maintained by the Native American Heritage Commission with a written agreement from the tribal government containing specified information.
- 9) Requires DFW to develop criteria to guide the release of beaver where there is a low probability of the released beaver becoming a nuisance or causing damage and conditions

exist for the released beaver to improve, maintain, or manage stream or riparian ecosystem functions.

- 10) Allows DFW to consider certain factors when relocating beaver, including, among others, the adequacy of a food source.
- 11) Defines beaver restoration program partners as federal agencies, nonprofit organizations, federally recognized tribes, nonfederally recognized California Native American tribes included on the contact list maintained by the Native American Heritage Commission, academic programs, and other entities.
- 12) Makes findings and declarations regarding the importance of beavers.

### **EXISTING LAW:**

- 1) Specifies that DFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species [Fish and Game Code (FGC) § 1802].
- 2) Authorizes any owner or tenant of land or property that is being damaged or destroyed or is in danger of being damaged or destroyed by certain animals, including, among others, the beaver, to apply to DFW for a depredation permit to kill the animals (FGC § 4181).
- 3) Makes it unlawful for any person to trap any fur-bearing mammal for purposes of recreation or commerce in fur (FGC § 4001).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

### **COMMENTS**:

- 1) **Purpose of this bill.** This bill requires DFW to develop a program to promote beaver restoration, and specifies several elements of that program.
- 2) **Background.** The North American Beaver (*Castor canadensis*) is considered a "keystone species." Beavers used to live in almost every stream in North America (except in the deserts) with an estimated population of 100-200 million. However, beavers were eliminated from much of their range by the late 1800s due to unregulated trapping and habitat loss, with approximately 10-15 million beavers in North America today.

There continues to be a long-standing policy of allowing landowners to receive depredation permits to kill beavers to protect land or property that is being damaged or destroyed or is in danger of being damaged or destroyed. A 2019 petition asked the Fish and Game Commission to address and improve beaver depredation practices, with a requirement to exhaust feasible non-lethal deterrence before killing and removing beavers, and requiring DFW to consider impacts to listed species from issuance of a depredation permit. DFW is due to release related guidance soon.

Beaver are native to California, and provide ecological benefits by building dams and lodges that slow down streams and rivers, which improves water quality and controls water downstream, allows for groundwater recharge, repairs eroded channels, reconnects streams to

their floodplains, and creates habitat for many plants and animals. Beavers create habitat complexity, significantly increase biodiversity, and can provide perennial flow to streams that would otherwise run dry. Through this process of ecosystem engineering, beavers can expand wetland, riparian, and wet meadow habitats and increase wildfire resiliency. Wildfire data from western states shows that beavers protect vegetation during wildfires. In one study, wildfire footprints were on average three times larger in creek sections without beavers than areas that had beavers.<sup>1</sup>

Environmental scientists have tried to duplicate the effectiveness of beaver dams by utilizing human-engineered structures called beaver dam analogues. Human-created beaver dams can achieve similar carbon sequestration and habitat benefits to that of real beaver dams, but at a much higher cost.

The relocation of beavers into new regions, or the reintroduction into regions where they once inhabited, also have a number of key benefits that align with California's current climate policy and goals. "Active and inactive/relic beaver complexes store 1150-1400 and 300-400 metric tons of carbon per hectare, respectively."<sup>2</sup> This is due to beaver structures creating complex waterways, vegetation, and habitats which facilitate slowing waters that deposit organic sediments and fibrous carbon, encourage sequestration in forests, grow new trees from beaver-gnawed stumps, and expand areas of land that periodically flood.

*Budget allocation.* This bill codifies elements of ongoing efforts at DFW related to funding and positions approved in the Fiscal Year (FY) 2022-2023 budget for beaver restoration efforts. A budget change proposal for FY 2022-2023 (3600-071-BCP-2022-MR) on beaver restoration included the following information:

"The [DFW] is actively involved in activities that are responsive to beaver management and reported human-beaver conflict, such as property damage. However, [DFW] is not well staffed or structured to truly support and manage this species as a successful contributor to our efforts to protect biodiversity and increase wildfire resiliency through implementing nature-based solutions. This [BCP] will develop dedicated staffing resources to revise beaver policies and guidelines, coordinate restoration efforts, proactively mitigate human-beaver conflict, and work towards relocating beavers into watersheds through consultation with local partners, state and federal agencies, tribes, and non-governmental organizations. Specifically, this program will support and help maintain:

- A comprehensive approach to beaver management in California;
- Native California tribes in their efforts to restore culturally significant beavers to their ancestral homelands and other lands they manage;
- Demonstrate the importance of beaver relocation and climate smart restoration;
- Beneficial habitat as refugia to drought, wildfire, and climate change;
- Increased abundance of ecologically and significant plants and wildlife species;

<sup>&</sup>lt;sup>1</sup> Fairfax, E. and Whittle, A. (2020). Smokey the Beaver: beaver-dammed riparian corridors stay green during wildfire throughout the western United States. Ecological Applications, 30(8):e02225. Accessed April 18, 2023, at https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/eap.2225.

<sup>&</sup>lt;sup>2</sup> Jordan, C.E. and Fairfax, E. (2022). Beaver: The North American freshwater climate action plan. WIREs Water, 9(4):e1592. Accessed April 18, 2023, at https://doi.org/10.1002/wat2.1592.

- Improve water quality and prolong flow during dry seasons;
- An integrated "toolkit" of resources and proven effective exclusion methods for deployment to mitigate human-beaver conflict, prevent damage due to beaver activity, and foster co-existence;
- Create a pathway to utilize beaver relocation in watersheds where beavers have been extirpated or co-existence strategies have been exhausted;
- Beaver habitat suitability models to reduce the risk of human conflict and to sustain long-term beaver occupancy; [and]
- Public awareness for beaver conservation and management."<sup>3</sup>

*Washington State reintroduction efforts.* The Washington Legislature authorized a beaver restoration program in 2012.<sup>4</sup> The Washington Department of Fish and Wildlife (WDFW) currently issues beaver relocation permits under a pilot project that allows WDFW to monitor and evaluate the beaver relocation program while developing a rule that will establish permit criteria for a permanent program.<sup>5</sup>

- 3) Support if amended argument. A coalition of 13 organizations collaborating as part of an informal California Beaver Policy Working Group writes with a "Support if Amended" position. Their letter highlights several positive elements of this bill, but also points out seven specific areas where the group would like to see further clarification. Some of the desired clarifications include: treating relocated beaver the same as naturally occurring beavers; not assuming that a released beaver will become a nuisance; including alternatives to dam alteration; ensuring landowners are knowledgeable about any necessary permits before relocation stranded fish; removing the potential criteria related to the age of relocated beaver; and stating that DFW has existing authority to capture, transport, and relocate beavers.
- 4) **Related legislation.** AB 273 (Gonzalez), Chapter 216, Statutes of 2019, prohibits the trapping of any fur-bearing mammal or nongame mammal for purposes of recreation or commerce in fur and the sale of the raw fur of any of these mammals otherwise lawfully taken.

### **REGISTERED SUPPORT / OPPOSITION:**

#### **Support**

None on file

#### **Opposition**

None on file

Analysis Prepared by: Keith Cialino / W., P., & W. / (916) 319-2096

<sup>&</sup>lt;sup>3</sup> Beaver restoration BCP, FY 2022-2023. Accessed April 18, 2023, at

https://esd.dof.ca.gov/Documents/bcp/2223/FY2223\_ORG3600\_BCP6018.pdf.

<sup>&</sup>lt;sup>4</sup> Revised Code of Washington, Title 77, Chapter 77.32, § 77.32.590. Accessed April 18, 2023, at

https://app.leg.wa.gov/rcw/default.aspx?cite=77.32.585.

<sup>&</sup>lt;sup>5</sup> WDFW. (n.d.). Beaver relocation in Washington. Accessed April 18, 2023, at https://wdfw.wa.gov/species-habitats/living/nuisance-wildlife/beaver-relocation.