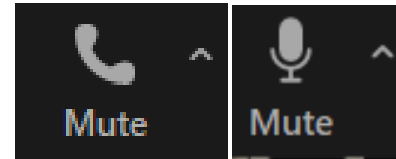


Columbia Basin Collaborative Predation Work Group

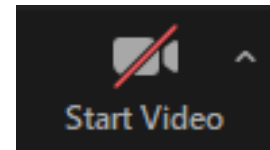
**March 1, 2023
1:00pm - 3:00pm PT**

Zoom Webinar Features – Work Group Members

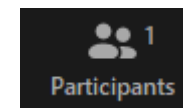
Keep yourself on mute when not speaking.



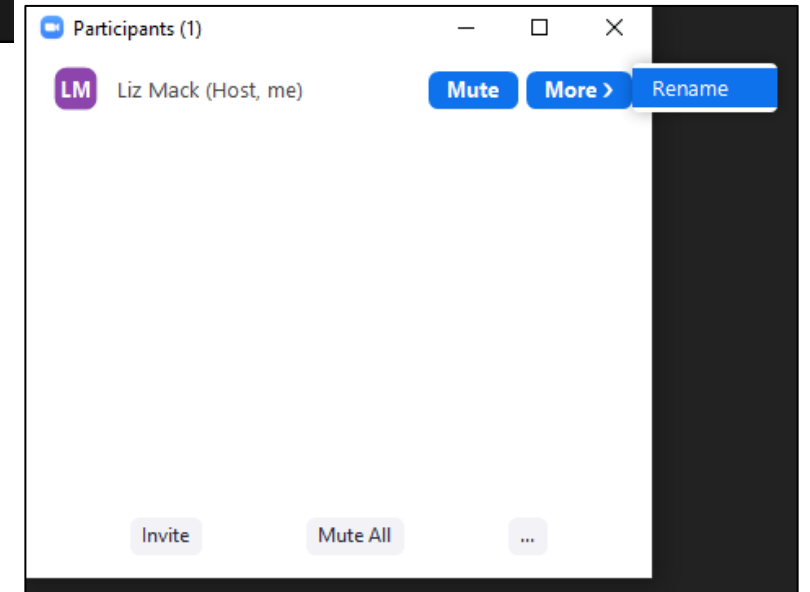
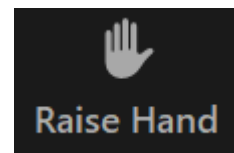
Use video, if possible, to promote face to face communication.



If needed rename yourself in the participant panel. Change your chat settings to "Everyone"

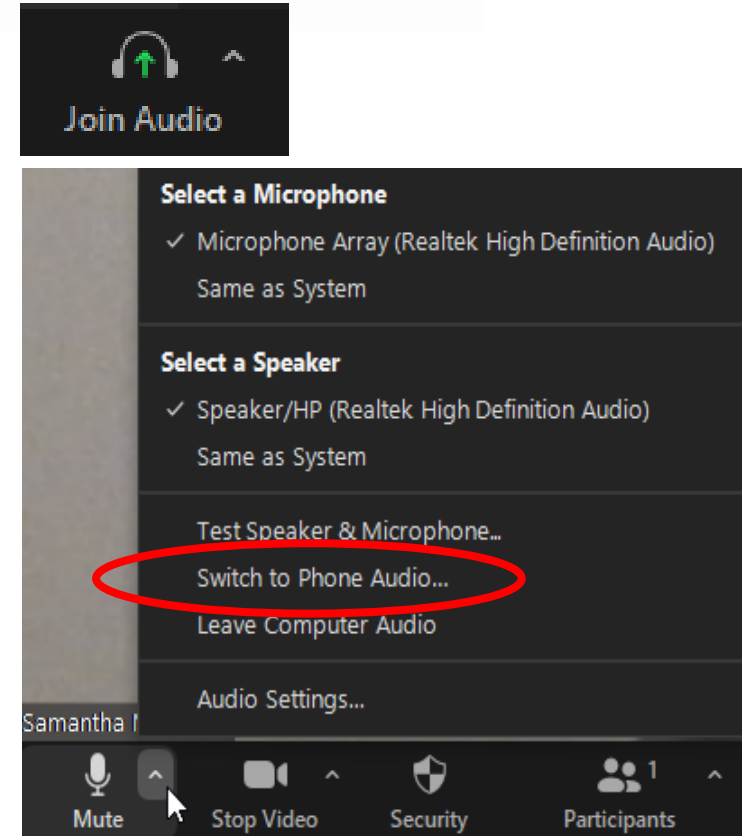


Find your raise hand function at the bottom of your screen



Zoom Webinar Features

- If you have not **connected your audio**, click on the “Join Audio” at the bottom left of your screen.
- To **switch to phone**, click the arrow next to the microphone icon and select “Switch to Phone Audio”.
- If you have joined by browser, please click “Audio Settings”

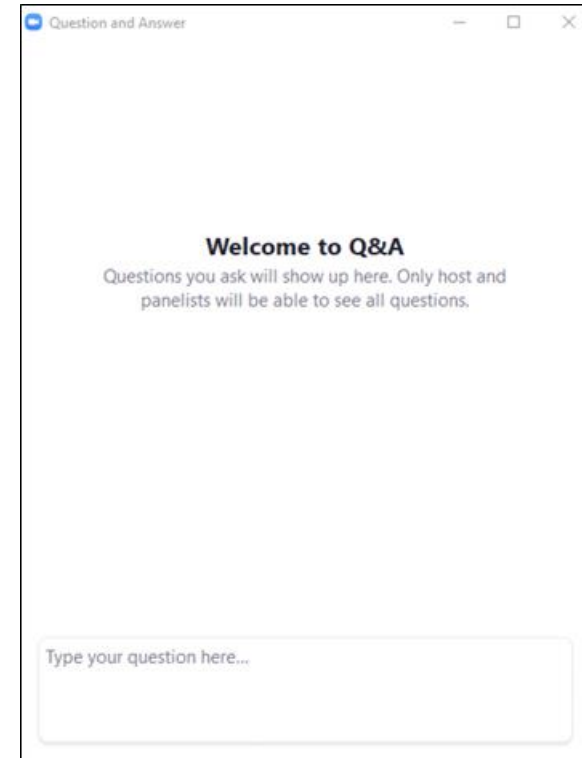
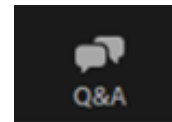


For technical support, please contact Angela Hessenius

Zoom Webinar Features – Audience Members

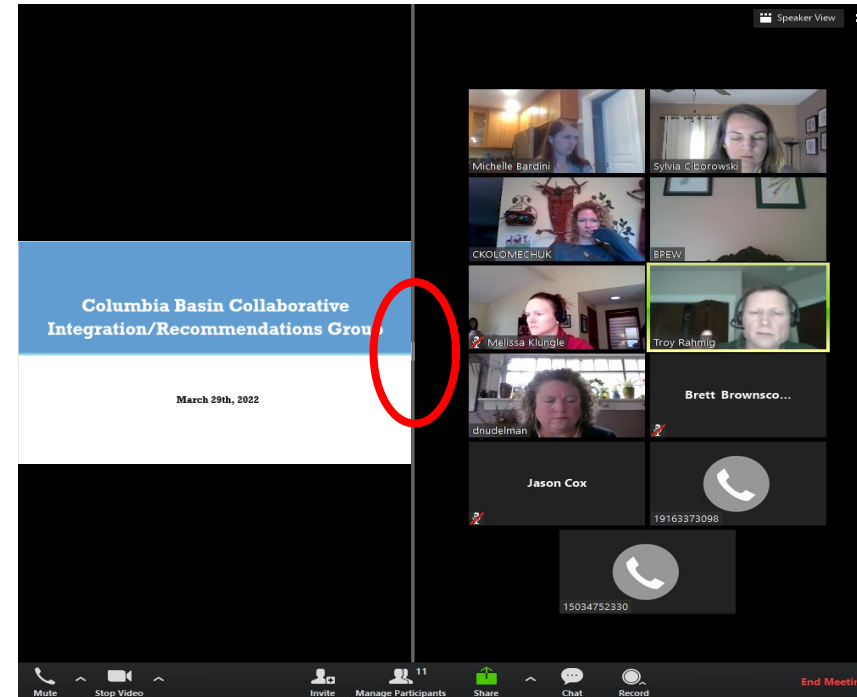
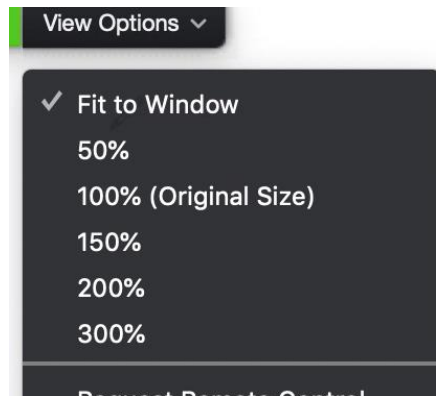
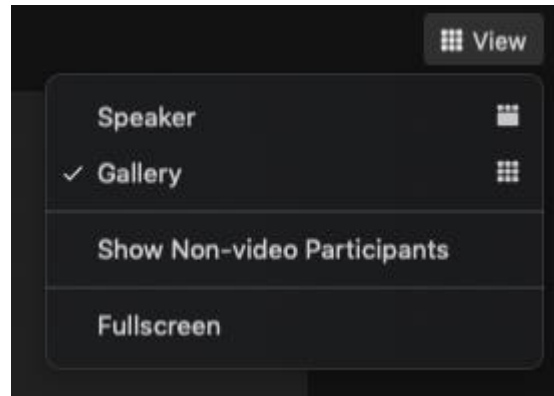
Audience members will remain muted.

If you have technology issues, please use the Q&A feature to reach our team



Zoom Webinar View Options

Adjust view options



*For technical support, please contact Angela Hassenius
(AHessenius@kearnswest.com, 203-885-9586)*

Meeting Guidelines

- Honor the agenda
- Be present
- Enter the space ready to collaborate
- Listen to understand and ask questions to clarify
- Balance speaking time
- Seek alignment and common ground wherever possible
- Focus on your interests, not positions
- Invent options for mutual gain
- Separate the people from the problem



Agenda Review

Time (PT)	Topic
1:00 – 1:10pm	Welcome and Agenda Review
1:10 – 1:40pm	Consensus on Recommendations: 1) Pinniped, 2) Cormorants, 3) Piscine
1:40 – 2:00pm	Review of Caspian Terns Recommendation
1:40 – 2:50pm	Review of Systemwide Recommendations
2:50 – 3:00pm	Confirm Next Steps, Upcoming Meeting Topics, and Summary

Desired outcome: Review and finalize short term recommendations.

Consensus on Recommendations

Consensus is reached when every Member, at the very least, does not oppose a decision.

Predation Draft Final Recommendations

Pinniped:

- Recommend enhancements and modifications to the existing Marine Mammal Protection Act Section 120 Pinniped Removal Program, including extending authorization and increasing funding.

Predation Draft Final Recommendations

Avian:

- Implement sustained management effort to reduce double-crested cormorant (DCCO) abundance on the Astoria-Megler Bridge colony and other colonies while minimizing DCCO dispersal to undesired areas.

Predation Draft Final Recommendations

Piscine:

- Develop a comprehensive piscine predator monitoring program for the Columbia River Basin (Northern pikeminnow, smallmouth bass, walleye)
- Other non-native fishes

BREAK – 5 MINUTES

Review of Caspian Terns Recommendation

Review of Systemwide Recommendations

Predation Systemwide Potential Actions

	Implementation Actions
1	Decreasing transit time
2	Increasing flow
3	Promote cooler temperatures to reduce consumption rates by warmwater fish species and reduce disease incidence that may predispose fish to predation by birds and other predators
4	Promote policies to limit climate warming
5	To extent possible, modify hatchery releases to discourage subsidization of predators
6	Restore rearing habitats in estuary
7	Promote efforts to conserve marine forage fish, which serve as an alternative food source for many predators in the estuary
8	Reducing water transit time, increase migration speed and reduce predation risk (MOP)

Predation Systemwide Potential Actions

	R M&E Actions
1	Long-term monitoring of avian colonies (predation rates, bird abundance)
2	Long-term study of effects of predators on reach, system-wide, and life-cycle survival (especially for steelhead)
3	Increasing spill
4	Investigate role of light reflection on water from structures (bridges, dams, piers, etc) to decrease visibility at night
5	Food web changes due to Shad and Siberian Shrimp for non-native predator populations

Next Steps

KW: Send the finalized recommendations to the SIWG

KW: Develop summary of meeting and schedule next Predation meeting

KW: Create survey systemwide recommendations

Pinniped Subgroup: Prepare non-lethal recommendation for the WG to review

Piscine Subgroup: Regroup and prepare recommendations for final review 3/23



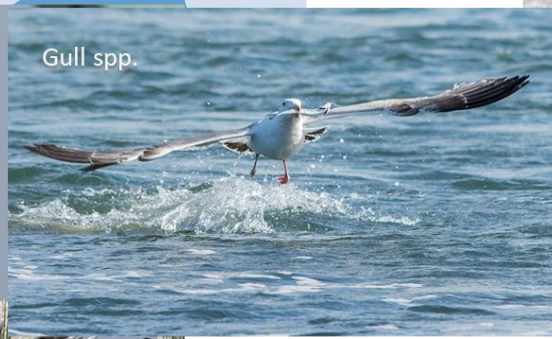
Photo credit: ODFW

Thank you!



Sources of Predation

AVIAN



MARINE MAMMAL



PISCINE



CBP Focus Species

CASPIAN TERNS, DOUBLE-CRESTED CORMORANTS, CA AND RING-BILLED GULLS

CALIFORNIA SEA LIONS, STELLER SEA LIONS, SEALS, *ORCAS**

NORTHERN PIKEMINNOW, WALLEYE, SMALLMOUTH BASS

Recommended Action Form

1. Work Group developing the action:
2. Summary of action:
 - a. Is this part of an existing program or new program?
3. Benefit: (link to matrices)
 - a. What benefit will the action provide?
 - b. What data support this?
4. Entities that would implement that action:
5. Timing:
 - a. How long will it take to implement that action?
 - b. How long until fish populations benefit from action?
6. Stock(s) benefited by the action and magnitude of benefit for each stock(s)
7. Estimated cost:
8. Uncertainties related to the action:
9. Regulatory processes or policies associated with the action:
10. Potential challenges:
11. Adaptive management (describe how this will be incorporated into to action):