

Creating a Fundraising Target for Kelp Forest Conservation

January 30th, 10am AEST (UTC +10)



KELP FOREST
ALLIANCE

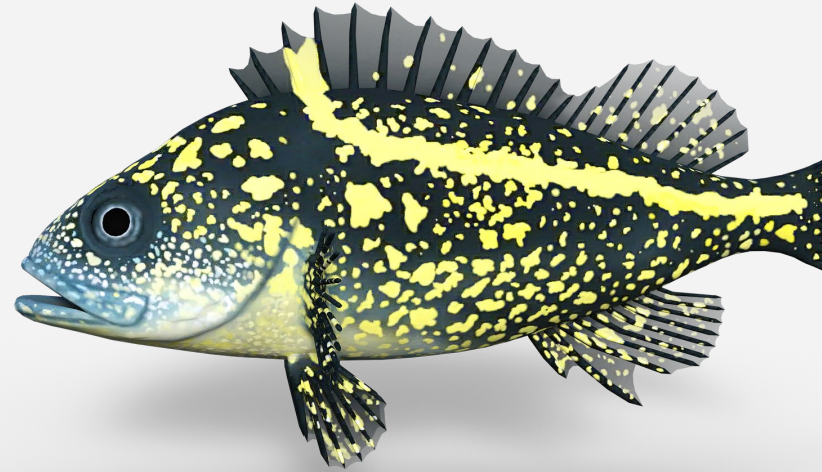
AGENDA

01 Kelp Forest
Challenge

02 Ocean Breakthroughs

03 Workshop

04 Next Steps



* Recording in Progress

An underwater scene featuring a large school of fish swimming through a dense kelp forest. The water is a deep teal color, and the kelp blades are a vibrant yellow-green. The fish are of various sizes and species, including several larger, dark-colored fish with prominent eyes. The overall atmosphere is serene and natural.

Kelp Forest Challenge

|
01.



Knowledge to
Educate



Area to Protect,
Restore, or Manage



Art to Inspire



Skills to Enable



Funds to Mobilize



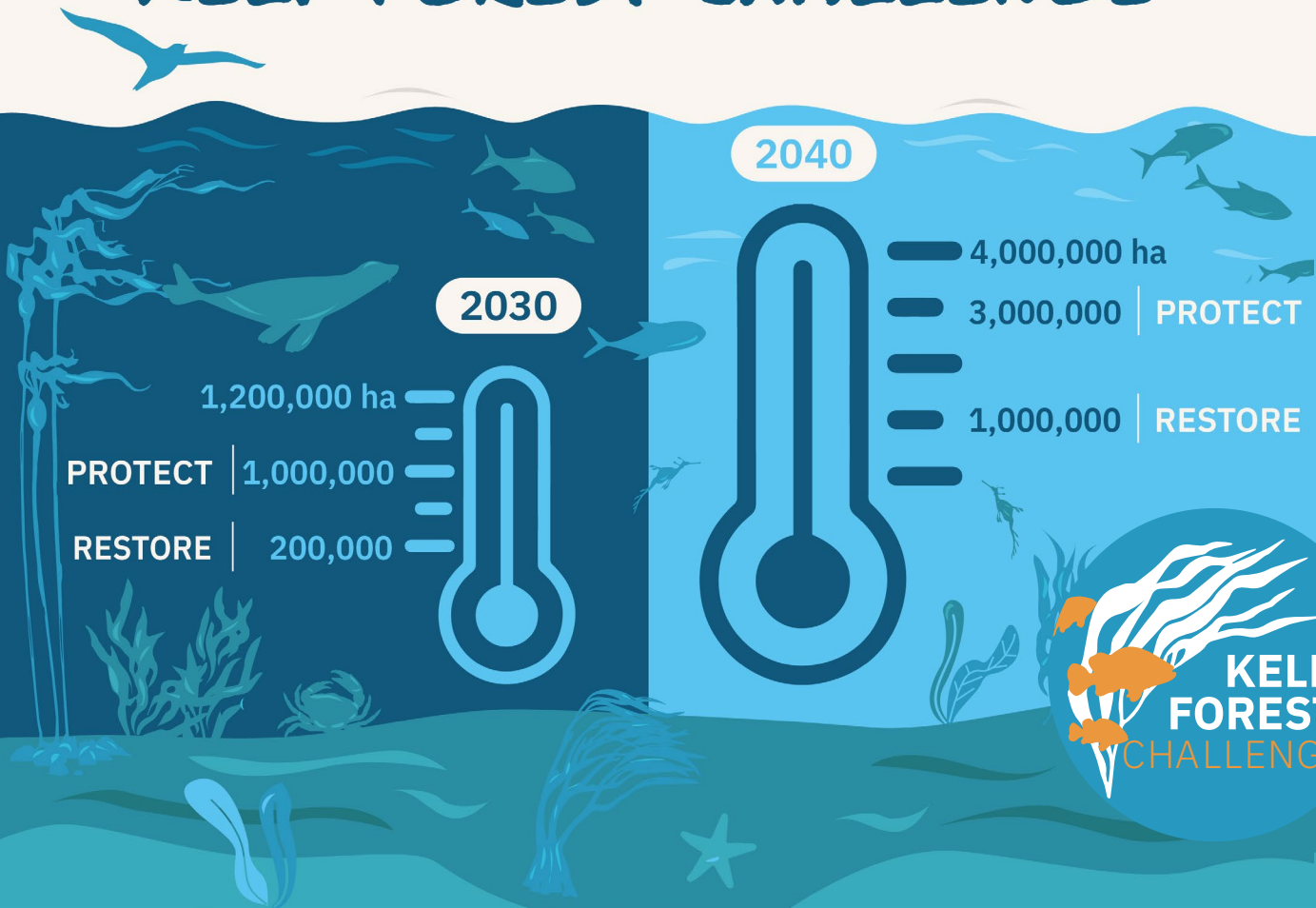
Research to Inform

**4 M ha protected and
restore by 2040**



Campaign for
Action

KELP FOREST CHALLENGE



KELP FOREST CHALLENGE

SAVE OUR KELP FORESTS

An illustration of a kelp forest. On the left, a dark blue vertical band contains text. To the right, a diver is swimming in a lighter blue area, surrounded by various kelp plants and fish. A bird is flying in the sky above the water.

28 Pledges

8 Countries

~55,000 ha for restoration

**Artists, tech, photographers,
media all involved**

Principles

An underwater photograph of two seals swimming in a kelp forest. The water is a clear, light blue-green color. The seals are dark brown and appear to be looking towards the camera. The kelp is dark green and brown, with long, thin blades reaching upwards. The overall scene is serene and natural.

1. **Mutual respect:** Participants collaborate with goodwill and respect for one another.
2. **Acknowledgment:** Intellectual contributions are acknowledged and properly attributed.
3. **Information sharing:** Participants promote open and free information sharing to advance the mission.
4. **Climate action:** Kelp restoration supports but does not replace the need for CO2 reduction, and participants should minimize their own emissions.
5. **Restoration standards:** Restoration efforts adhere to Society for Ecological Restoration principles, including stakeholder engagement, knowledge integration, and measurable goals.
6. **Protection and prevention:** Ecosystem protection and good management take priority over restoration, which should only follow mitigation of the cause of degradation.
7. **Indigenous rights:** Projects respect the territorial rights and custodianship of Indigenous and Aboriginal peoples.
8. **Stakeholder diversity:** Projects engage diverse stakeholders and ensure equitable distribution of ecosystem benefits.
9. **Adaptive decision-making:** Decisions and actions proceed despite data gaps, with the understanding that recommendations may evolve as more data becomes available.

How Are We Doing?



**KELP FOREST
ALLIANCE**

STATE OF THE WORLD'S KELP FORESTS REPORT

STATE OF THE WORLD'S KELP FORESTS V1.0. KELP FOREST ALLIANCE, SYDNEY, AUSTRALIA.
EGER, AARON M., MCHUGH, TRISTIN A., EDDY, NORAH, VERGÈS, ADRIANA (EDITORS).

v1.0



TRACKING PLATFORM

KELP FOREST ALLIANCE

RESTORATION PROJECT ✕
University of Maine - Wells
This study aimed to examine feedback mechanisms and alternate stable states in kelp ecosystems in Maine, USA. Specifically, it looked...

ORGANISATION
University of Maine

SPECIES:
Saccharina spp.

[View Project Details](#)

Greenland

North Atlantic Ocean

Restoration Projects & Protection Areas

18849

Area Restored (ha)

240

Number of
Restoration Projects

585

Size of Community
(People)

02. THE OCEAN BREAKTHROUGHS



MARINE CONSERVATION

By 2030, investments of at least \$72 bn secure the integrity of ocean ecosystems by protecting, restoring, and conserving at least 30% of the ocean for the benefit of people, climate, and nature.

MANGROVE
BREAKTHROUGH

CORAL
BREAKTHROUGH



OCEAN-BASED TRANSPORT

SHIPPING BREAKTHROUGH
By 2030, zero emission fuels make up 5% of international shipping's energy demand. 450,000 seafarers need to be retrained and upskilled. At least 30% of global trade needs to move through climate-adapting ports.



COASTAL TOURISM

Coming up soon



AQUATIC FOOD

By 2030, provide at least \$4 bn per year to support resilient aquatic food systems that will contribute to healthy, regenerative ecosystems, and sustain the food and nutrition security for 3 billion people.



OCEAN RENEWABLE ENERGY

By 2030, install at least 380 GW of offshore capacity while establishing targets and enabling measures for net-positive biodiversity outcomes and advocate for mobilizing \$10 bn in concessional finance for developing economies to reach that goal.

By 2050, a healthy and productive Ocean has delivered up to 35% GHG emissions reduction and contributed to a resilient, nature-positive and net-zero future.

Marrakech
Partnership



Global Climate
Action



RACE TO ZERO



OCEAN & CLIMATE
PLATFORM

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SDG 14
OCEAN LIFE



OCEAN & CLIMATE
PLATFORM

MANGROVES - 2030

Halt loss

Restore 409,000 ha

Protect 6.1 M ha

Invest \$4.07 B

CORALS - 2030

Halt loss

Restore 1 M ha

Protect 6.5 M ha

Invest \$12 B

Benefits

Global Profile

27 Countries Involved

Political Champions

Elevate Kelp

Creating a Kelp Forest Breakthrough

An underwater photograph of a kelp forest. Several seals are visible, swimming and resting among the dense, green kelp stalks. The water is clear and blue, with sunlight filtering through the canopy of the kelp.

Build off Kelp Challenge

Add a fundraising target

Launch at ISS2025

An underwater photograph of a kelp forest. Two seals are visible: one in the upper right and another in the lower center. The water is a deep blue-green, and the kelp stalks and leaves are dark and dense. The text is overlaid on the image in a bold, black, sans-serif font.

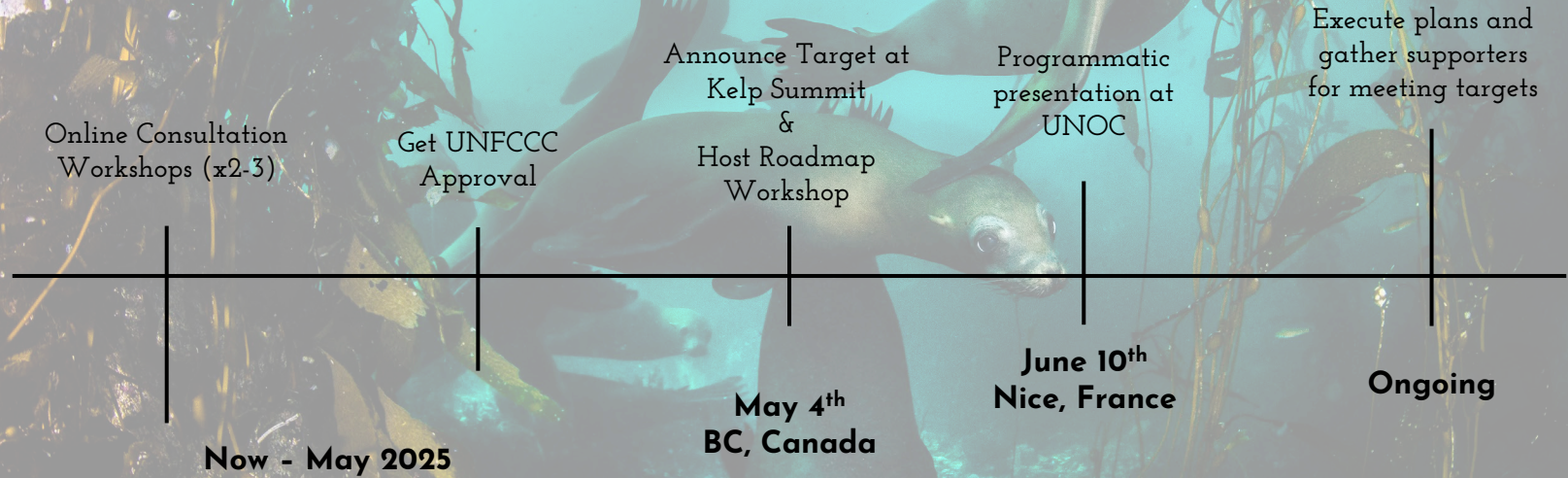
Kelp Forest Summit May 4th

Victoria, BC, Canada

Open to All

Develop Action Plans

Timeline for Target



An underwater scene featuring a school of fish swimming through a dense field of yellow seaweed. The water is a deep teal color, and the lighting is soft and diffused, creating a serene atmosphere. The fish are of various sizes and are scattered throughout the frame, with some larger fish in the foreground and smaller ones in the background. The seaweed consists of long, thin blades that sway gently in the water.

Creating a Target

|
03.

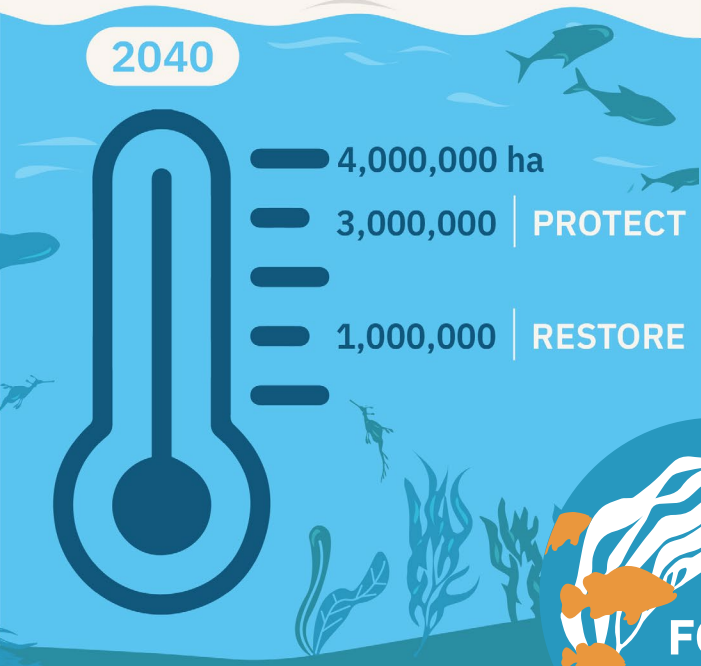
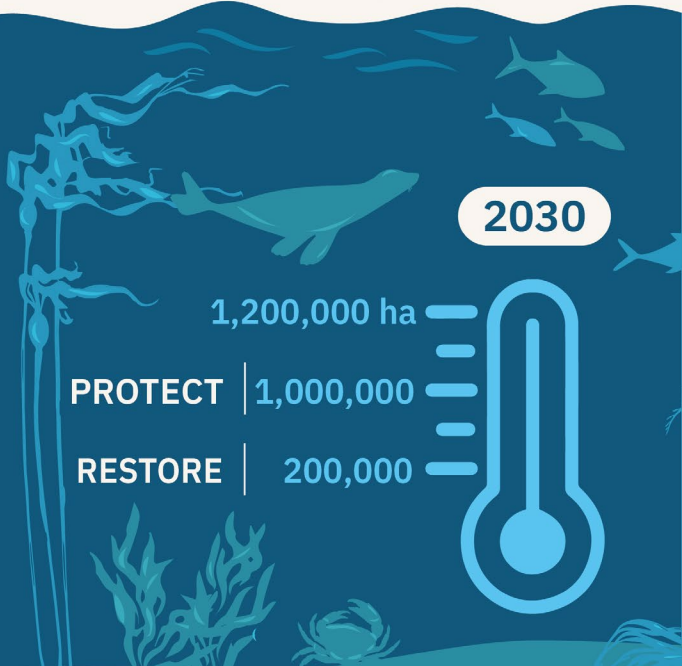
Scope for Today

An underwater photograph of a kelp forest. Several seals are visible, swimming and resting among the dense, green kelp. The water is clear and blue, with sunlight filtering through the canopy of seaweed.

Explore options for setting
a fundraising number

Group discussion

Kelp Values



Restoration Benchmarks

An underwater photograph showing several seals swimming through a dense kelp forest. The water is a clear, light blue-green color. The kelp stalks and leaves are visible throughout the scene, creating a textured background. The seals are the central focus, with one in the upper right and another in the lower center.

Corals - \$10,000 per hectare

- 1% of ocean coverage (Johansen and Vestvik et al. 2020)

Mangroves - \$1,100 per hectare

Protection Costs

An underwater photograph showing two seals swimming in a kelp forest. The water is a clear, light blue-green color. The kelp stalks and leaves are visible in the foreground and background, creating a dense, textured environment. The seals are the central focus, with one in the upper right and another in the lower center.

Global average, \$650 per hectare per year

Balmford et al. 2004

Mangroves \$380 per hectare over 7 years

Balmford et al. 2024

Kelp Forest Costs

An underwater photograph of a kelp forest. The water is a deep, clear blue. In the foreground, a large seal is swimming towards the right, its head tilted upwards. Another seal is visible in the background, swimming towards the left. The kelp plants are tall and thin, with long, narrow leaves. The overall scene is serene and natural.

High variability, 5-600k/ha

Eger et al. 2022

Large scale successes, 1-12k/ha

Eger et al. 2020

Group Discussion

An underwater photograph showing several seals swimming in a kelp forest. The water is a deep blue-green color, and the kelp stalks and leaves are visible throughout the scene. The seals are the central focus, with one in the foreground looking towards the camera and others swimming in the background.

What factors do we consider?

NEXT STEPS



Propose a Plan

Draft target options



Next Workshops

February and March



Launches

ISS and UNOC



The Nature
Conservancy



UNSW
SYDNEY

Thank You!

Join Us: bit.ly/KFAJoin

[Kelpforestalliance.com/](https://kelpforestalliance.com/)



Creating a Fundraising Target for Kelp Forest Conservation #2

February 27th, 10am AEST (UTC +10)



KELP FOREST
ALLIANCE

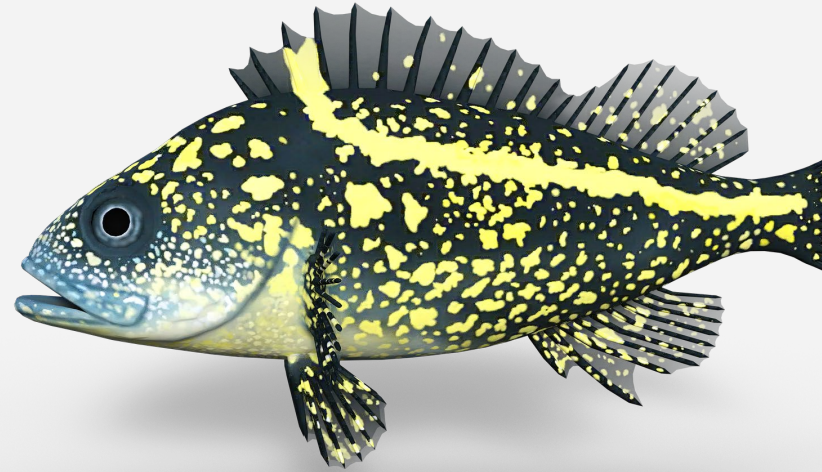
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01 Recap

02 Ocean Breakthroughs

03 Values

04 Next Steps



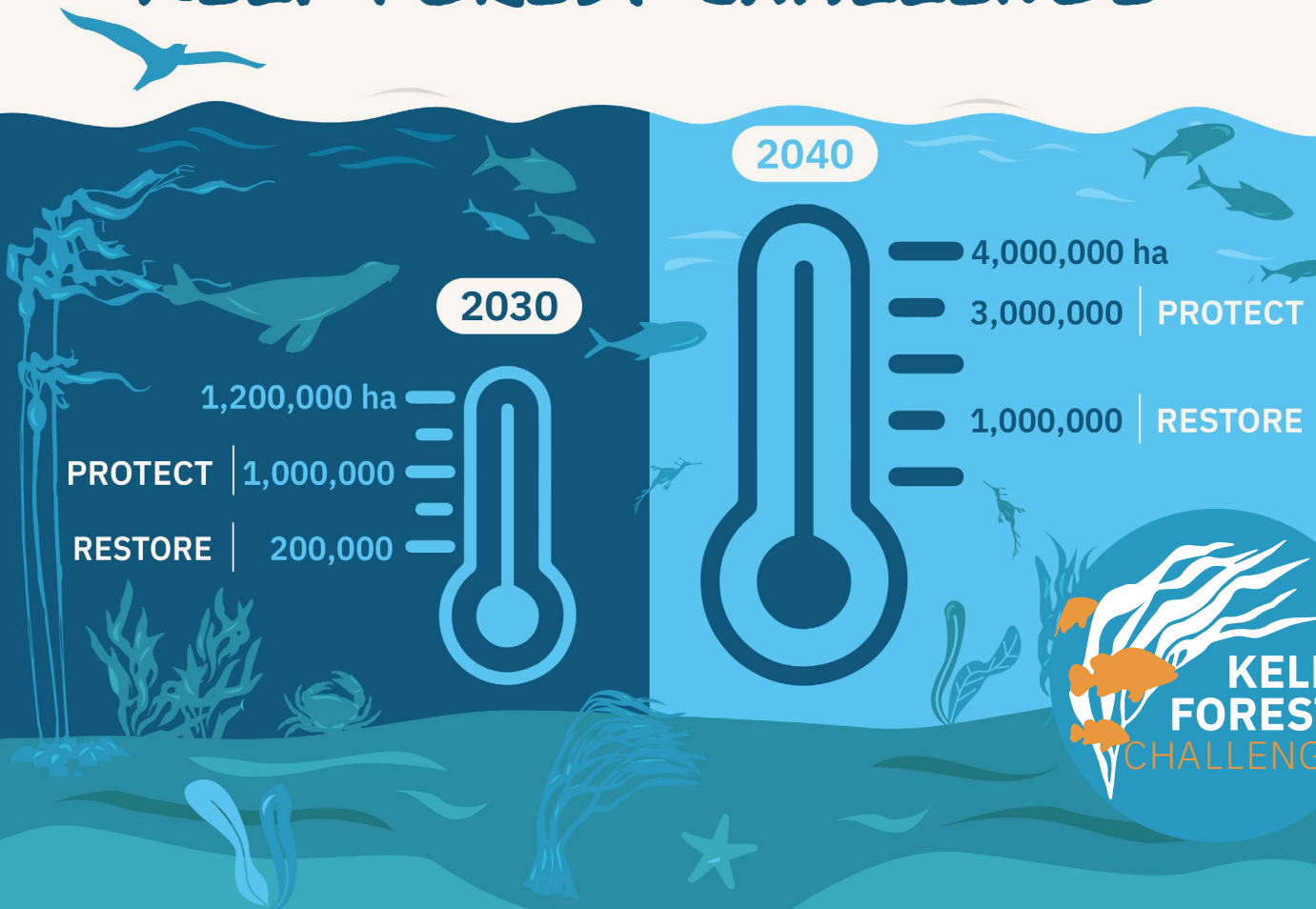
* Recording in Progress

An underwater scene featuring a school of fish swimming through a dense field of yellow and green seaweed. The water is clear and blue-green. The fish are of various sizes and species, including several larger, dark-colored fish with white spots. The seaweed consists of long, thin blades and thicker, brownish stems. The overall atmosphere is serene and natural.

Recap

|
01.

KELP FOREST CHALLENGE



Typology of Actions



Natural Regeneration

- Eliminating kelp harvesting
- Eliminating water pollution
- Eliminating habitat destruction

Assisted regeneration

- Seeding
- Transplanting
- Supplementing natural habitat

Protection

- Marine protected areas
- Protecting or restoring natural predator populations which benefit kelp forests
- Problematic species control
- Competitor removal
- Managing the populations of competitors such as turf algae or coralline algae

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PARIS AGREEMENT TO 2015



OCEAN & CLIMATE
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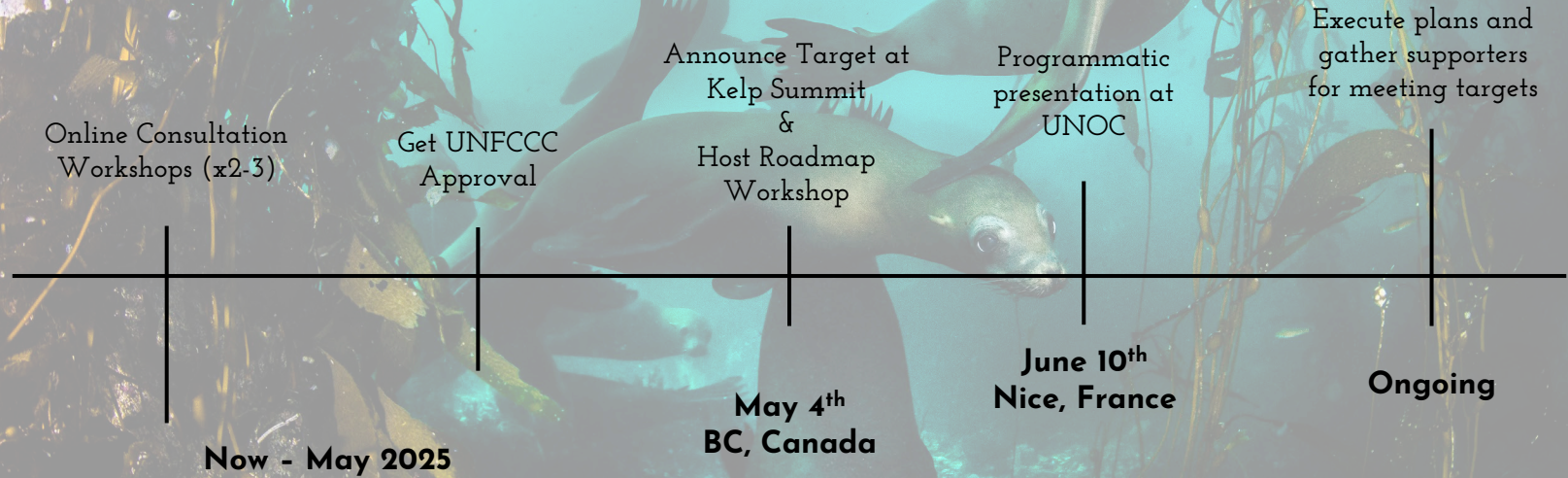
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Creating a Target

|
03.

Area Remaining

An underwater photograph showing several seals swimming in a kelp forest. The water is clear and blue, and the kelp is green and brown. The seals are the main focus, with one in the foreground and others in the background.

Restoration: 980,000 ha

Protection: 1.4 M ha

Cost Scenarios - Protection (\$/ha)

An underwater photograph of several seals swimming in a kelp forest. The water is clear and blue, and the kelp is green and brown. The seals are dark-colored and appear to be resting or moving slowly.

Low - \$125

Med - \$650

High - \$1,300

Cost Scenarios - Protection Total

An underwater photograph of several seals swimming in a kelp forest. The water is a clear, light blue-green color. The kelp stalks are dark and thin, with some leaves visible. The seals are dark-colored and appear to be in motion, with their flippers visible. The overall scene is serene and natural.

Low - \$0.88 B

Med - \$4.55 B

High - \$9.10 B

Cost Scenarios - Restoration (\$/ha)

An underwater photograph of several seals swimming in a kelp forest. The water is clear and blue, and the kelp is green and brown. The seals are of various sizes and are swimming in different directions. The overall scene is peaceful and natural.

Low - \$1,000

Med - \$10,000

High - \$100,000

Cost Scenarios - Restoration Total

An underwater photograph of several seals swimming in a kelp forest. The water is clear and blue, and the kelp is dark green and brown. The seals are the central focus, with one in the foreground and others in the background.

Low - \$0.98 B

Med - \$9.82 B

High - \$49.08 B

Cost Scenarios - Combined 5 Years

Total Cost Estimate		Restoration		
		Low	Med	High
Protection	Low	1.68	10.52	49.78
	Med	4.48	13.32	52.58
	High	7.98	16.82	56.08

Things we did not do

An underwater photograph of two seals swimming in a kelp forest. The water is a clear, light blue-green color. The seals are dark brown or black. One seal is in the upper right, looking towards the camera. Another seal is in the lower center, swimming away. The background is filled with long, thin blades of seaweed and other marine plants.

Adjust for location and currency

Model diminishing returns

Discount costs

An underwater photograph showing several seals swimming in a kelp forest. The water is a clear, light blue-green color. The kelp stalks and leaves are visible on both sides of the frame, creating a natural habitat. The seals are the central focus, with one in the foreground and others slightly behind it. The word "Discussion" is overlaid in the center of the image in a bold, black, sans-serif font.

Discussion

NEXT STEPS



Revise Plan

Revise target options



Next Workshops

March



Launches

ISS and UNOC



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Thank You!

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