



Recommendations for the LCP Revision

from the
Fort Bragg Headlands Consortium

For:
Fort Bragg City Council
Fort Bragg Planning Commission

From: Fort Bragg Headlands
Consortium
Presented by: John Gallo, Ph.D
March 21, 2019



Presentation Outline

- FBHC
 - Membership
 - Goals/Principles/Recommendations
- Contextual Perspective
- Tonight's Recommendations



Fort Bragg Headlands Consortium (FBHC)

- Members are affiliated with organizations, but do not necessarily represent organizations
- John Gallo, Ph.D.
 - Senior Scientist, Conservation Biology Institute
- Sheila Semans
 - Executive Director, Noyo Center for Marine Science
- George Reinhardt
 - Affiliate, Noyo Headlands Unified Design Group
- Bill Lemos
 - Consultant, Natural Resources Defense Council; Retired Science Teacher
- David Jensen
 - President, Mendocino Coast Audubon Society; Retired Environmental Health Director of Mendocino County
- Leslie Kashiwada, Ph.D.
 - Past Director of the So. Cal. Biotech Center, past Chair of Biological Science Department, Mira Costa College
- Teri Jo Barber
 - Licenced Hydrologist
- Doug Kern
 - Former Director of Conservation, Mendocino Land Trust



Community Goals that the FBHC is Pursuing

- **Improved Quality of Life**
 - for residents, businesses and visitors.
- **Improved Community Resilience**
 - so we are responsive to a rapidly changing technological and climatic future.
- **Sustainable Economic Growth**
 - with a local economy that sustains itself and the environment.



Guiding Principles of the FBHC

- Protect and Restore the **Ecological Integrity** of the Fort Bragg Headlands
- **Smart Growth** on the Headlands
 - Smart Growth is efficient and sustainable land development that optimizes prior infrastructure investments, and consumes less land.
 - The full definition, and supporting materials, is available from the American Planning Association:
<https://www.planning.org/policy/guides/adopted/smartgrowth.htm>



Objectives

- Reclaim an accessible, safe and clean beach and bay
- Develop adjacent to existing development
- Daylight creeks and restore jurisdictional wetlands
- Clean up remaining toxins
- Protect and restore wildlife corridors
- Reduce impervious surfaces
- Quantify economic costs and benefits of a vibrant, restored coastline.
- Preserve the remaining forest



Contextual Situation

- Science
 - Sustainability Science
 - Ecology and Geography
- Importance of Rural / Urban Context going Forward.
-



Quick Sequence of Maps from Global to local



Diagram of \$ flows in and out of community for last 150 years



Diagram of a more balanced \$ Flow



Allie Caulfield



By Oleksandr Pidvalnyi

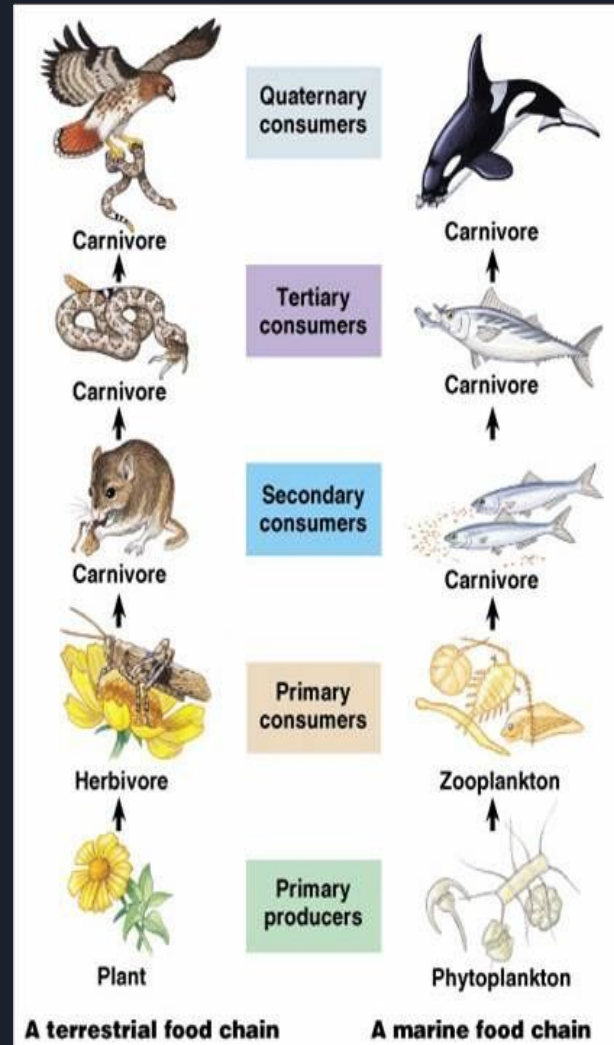


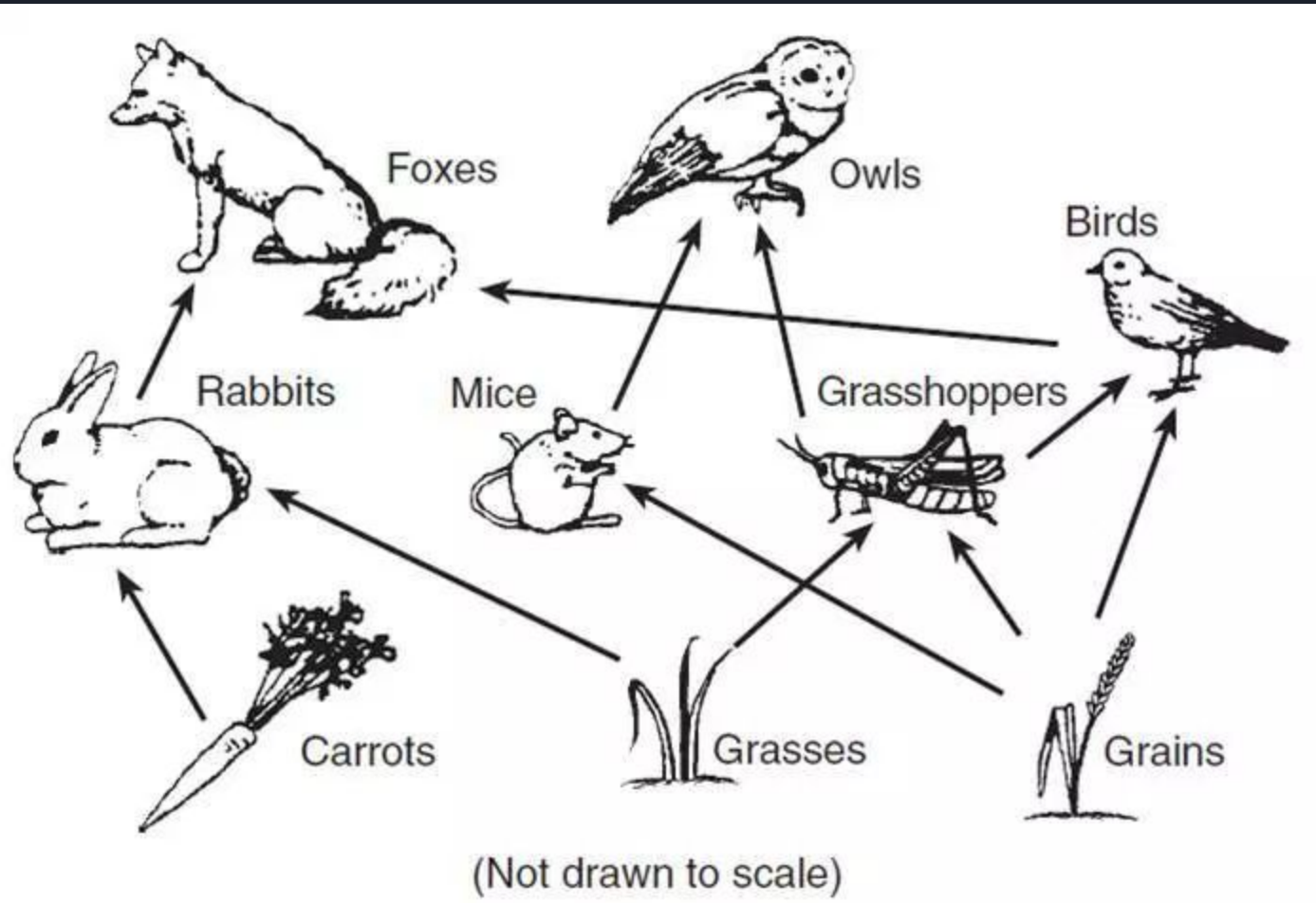


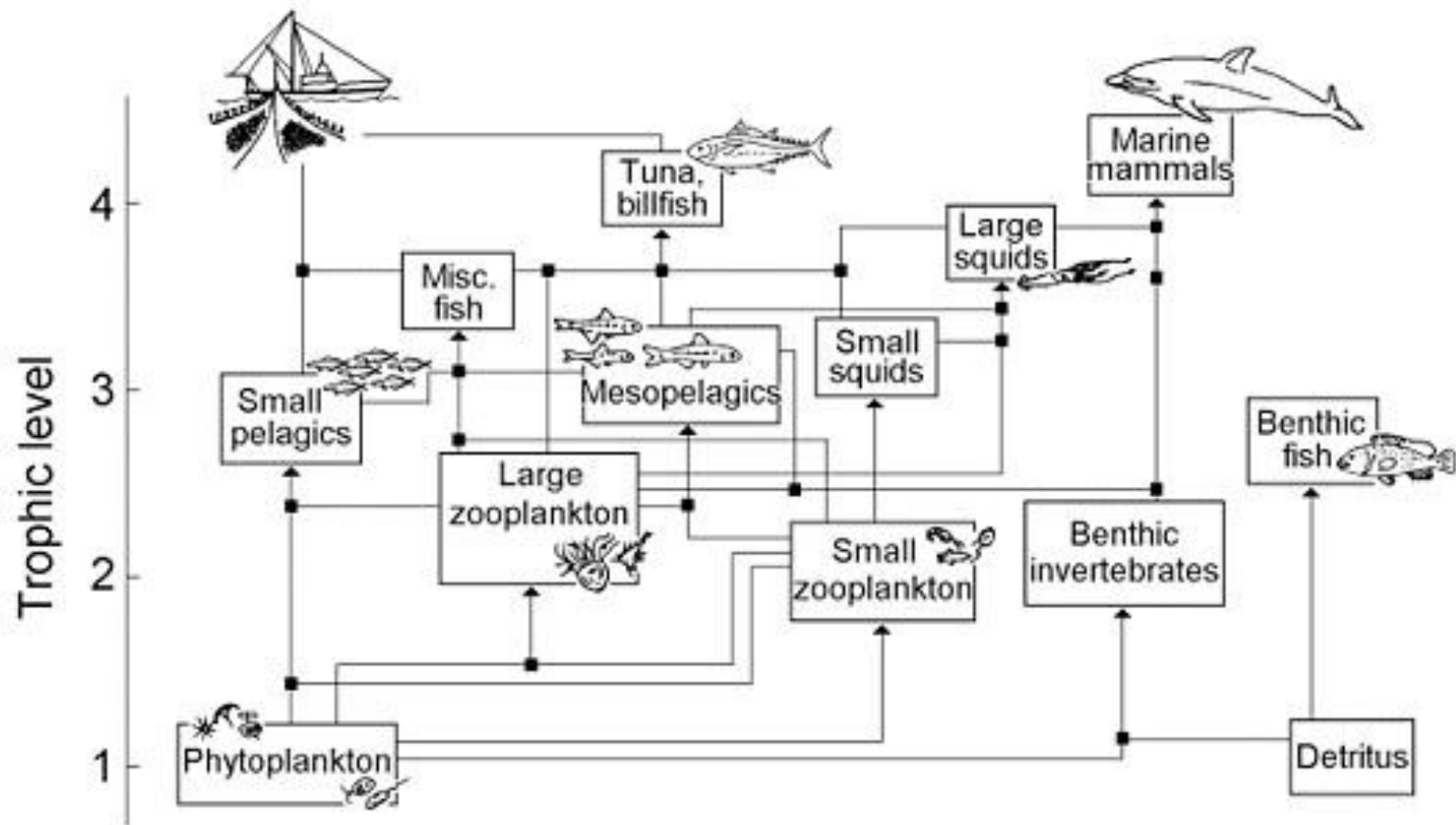


Food Chain; Trophic Levels

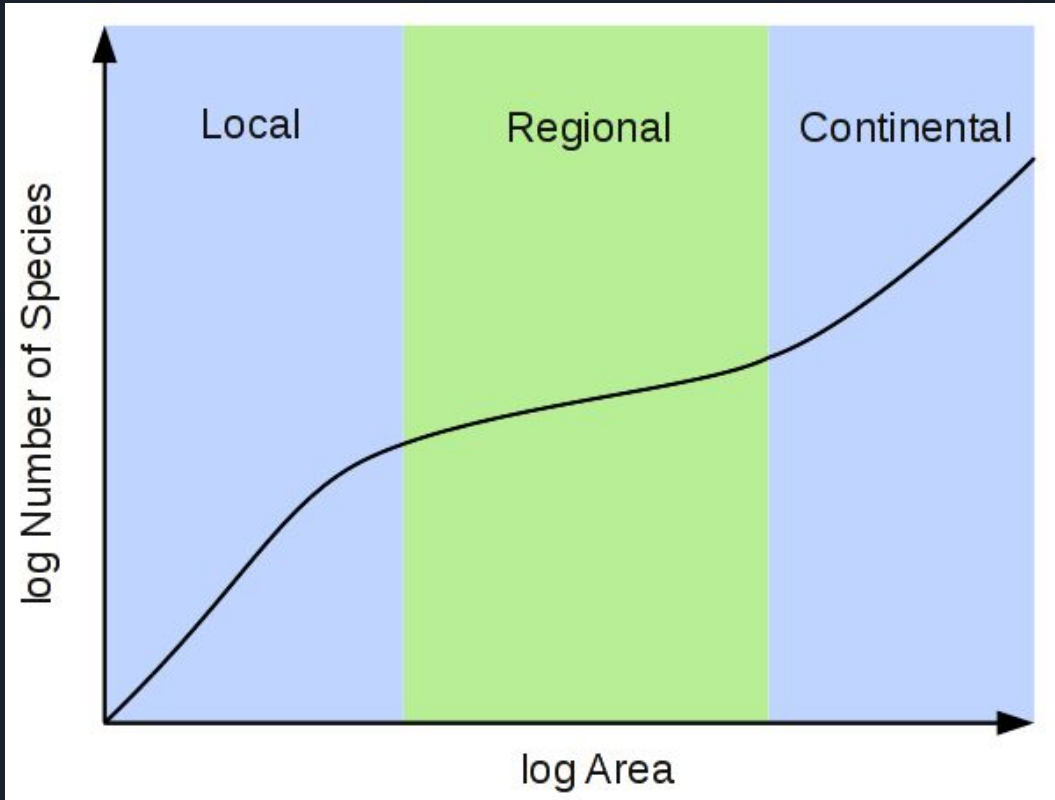
[Diagram from Canary Zoo](#)







Species Area Curve



(Kluyver 2010)



By G.C. Menezes

Attracting an Open Space Owning and Managing Organization in Cooperation with the City

What is going to make the risk worth the reward?



Restoration is Possible





United States
Postal Service

Queenie's
Roadhouse Cafe

Elk Store









Todds Point

Pomo Bluffs Park

Noyo Headlands Park

Emerald Dolphin
Inn & Mini Golf

Surf Motel & Gardens

McDonald's

Harvest Market

Noyo Beach Off
Leash Dog Area

North Cliff

Super 8 by
Wyndham Fort Bragg

Google



Get Started

Explore

Create

Community

My Workspace

What is Data Basin?

What can I do?

Who is using Data Basin?

How do I start exploring?

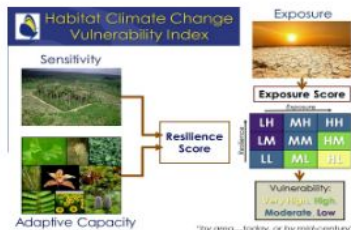
Data Basin is a science-based mapping and analysis platform that supports learning, research, and sustainable environmental stewardship.



Get started quickly with Data Basin

[Take a Tour](#)

Explore Data Basin Guides & Case Studies...



Assessing Climate Change for Landscapes and Major Vegetation Types across the Inter-Mountain West

Working with the Bureau of Land Management, NatureServe ecologists are assessing climate change across the West. The objective of this effort is to identify trends in climate across the entire western conterminous United States, and given

Explore Data Basin Mapping Tools

With the Data Basin full-screen mapping tools, you can:

- View and analyze geospatial conservation data
- Collaborate with colleagues using sharing and commenting tools
- Generate custom analyses and summary reports of your data
- And much more...

How to Create a Map



Gateways are unique spaces for finding curated spatial data. They build upon the existing Data Basin framework and are customized to meet the needs of a target audience. Customizations can include custom mapping and analysis tools.

[See All Gateways](#)

Fort Bragg Headlands Mapping Project

technical support, see also our new [Mapping Questions and Answers page](#). This is a grassroots funded effort, you can [donate directly to this effort, here](#). Currently, any funds raised are going towards additional outreach and training on how to use this mapping resource.

Tags

noyo, fort bragg, headlands

Gallery Contents

Gallery Credits

Comments (0)

Sort by: Default ▼



Map
Daylighting the Creeks of the Fort Bragg Headlands



Map
Elevation and Hillshade of the Fort Bragg Headlands



Map
The Connection between Fort Bragg and the Ocean



Map
Historic Locations of the Noyo Headlands Restoration Streams



Map
Stormwater Management for the Fort Bragg Headlands

► Misc Data and Secondary Maps (14 items)



Go to Map

<https://databasin.org/maps/7dae0dd2d78742aa8d8f9ebf7bb260a7/active#>



Recommendations (1 of 2):

- R1: Better enable more Industrial Development in the Greater Fort Bragg Area
 - Make a sub-committee or direction to staff to explore and report out on actions/cost needed for making industrial development more feasible
- R2: Gather data about the cement and asphalt (location, depth) and put into publicly accessible map layers.
- R3: Shape LCP Amendment policies and zoning boundaries that relate to OU E so that they better facilitate clean-up and restoration
- R4: Eliminate the ambiguities of the Big Idea Policy, at least, or simply remove it and keep the Urban Reserve exactly that.



Recommendations (2 of 2):

- Spatial Recommendations
 - SR1: Move “North Hotel” Back sufficiently
 - Consider a mixed zoning district in overlap area to give landowner options
 - SR2: Remove “South Hotel” from the Zoning Map
 - SR3: Do not put the proposed train tracks and parking next to the coastal trail
 - SR4: No Timber Industrial in “Open Space Center”
 - Make that Open Space, for now
 - SR5: No Heavy Industrial on Headlands Grasslands
 - Make that Urban Reserve or Park



If/When to put this material on an Agenda

- Implore to add onto an upcoming agenda.
- When?
 - What the Coastal Commission is NOT
 - Encourage you to agendaize before hearing from Coastal Commission Staff (June at least)
 - Ideally send them an updated Zoning Map
 - Implore you to do all this before submitting “Last Year’s Draft” to the Coastal Commission (Targeted for June 2019 still on the timeline)



Recommendations will help the Goals, Principles, and objectives outlines earlier.





- Wildlife Corridor; (i.e. Coastal Trail Breathing Room)
- Food Web and Wildlife; (i.e. Attracting a big time Open Space partner)
- Develop adjacent to existing development
- Daylight creeks and restore jurisdictional wetlands
- Reduce impervious surfaces



APPENDIX

Millenium Assessment

- Over 1,000 scientists
- 3+ Years
- 1,000s of pages
- These Scenarios
 - Which will be the Dominant Social Paradigm (DSP)?
 - Environmental Impact over Time
 - Shifting DSP
- How does this relate to Fort Bragg's Vision statement for the Headlands?

		World Development	
		Globalization	Regionalization
Environmental Management	Reactive	 Global Orchestration	 Order from Strength
	Proactive	 TechnoGarden	 Adapting Mosaic

A. Spatial
Areas



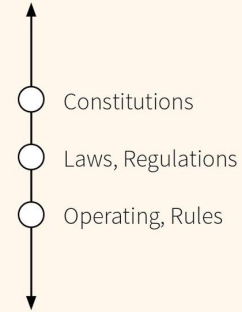
B. Temporal
Rates, Durations,
and Frequencies



C. Jurisdictional
Administrations



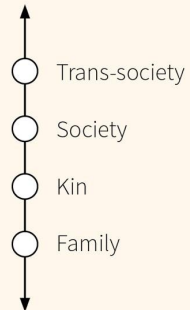
D. Institutional
Rules



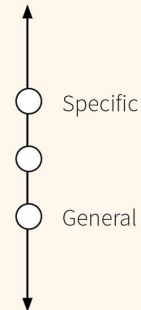
E. Management
Plans



F. Networks
Links





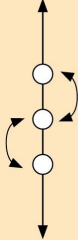
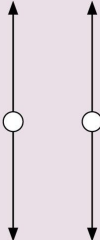
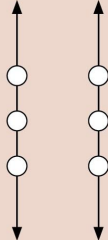
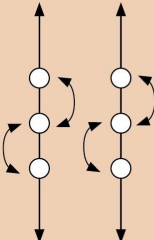
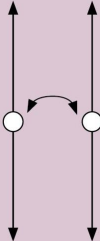
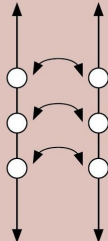
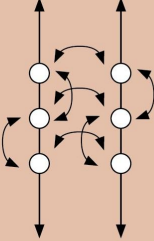
G. Knowledge
Truths



H. Other?





		SCALE		
		SINGLE	MULTI	CROSS
THEME	SINGLE			
	MULTI			
	CROSS			



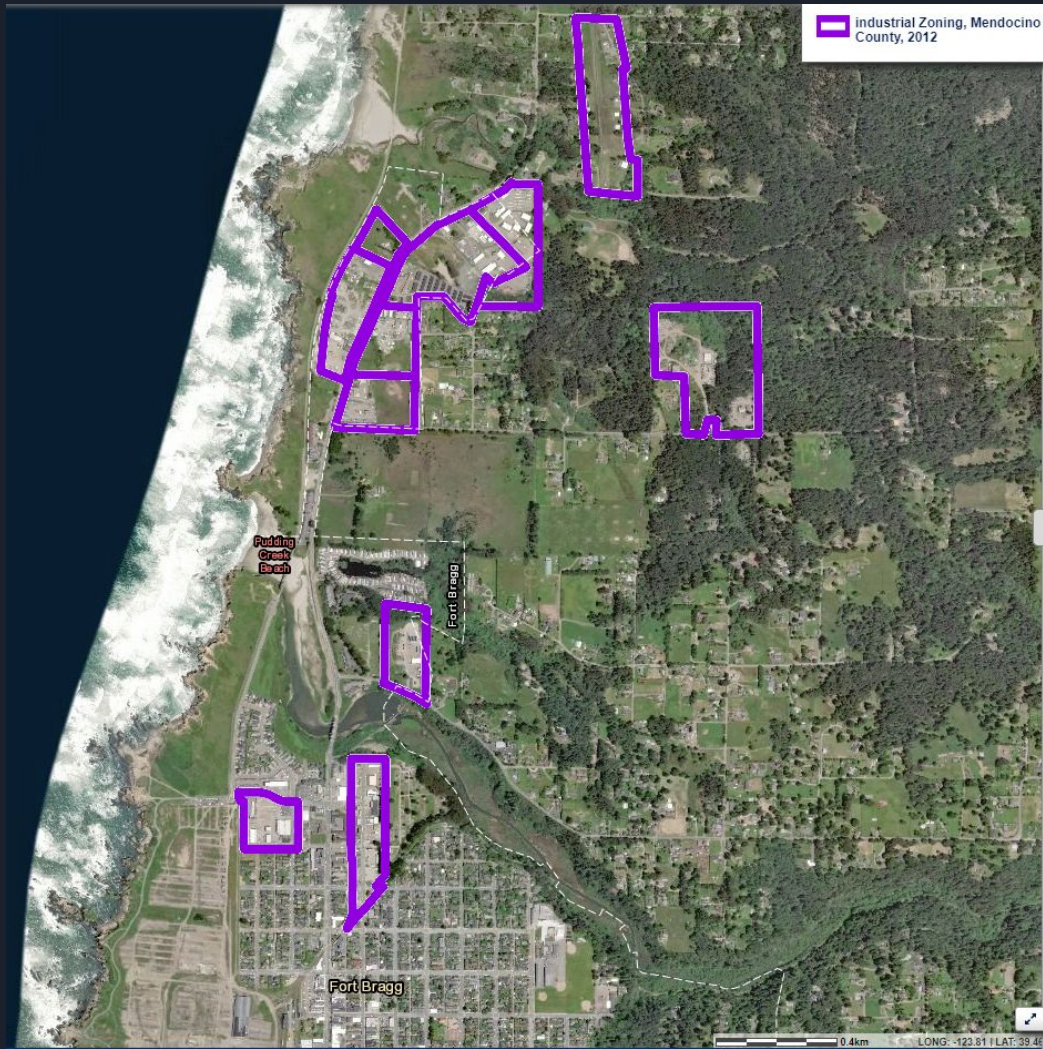
Key links:

Gallery:

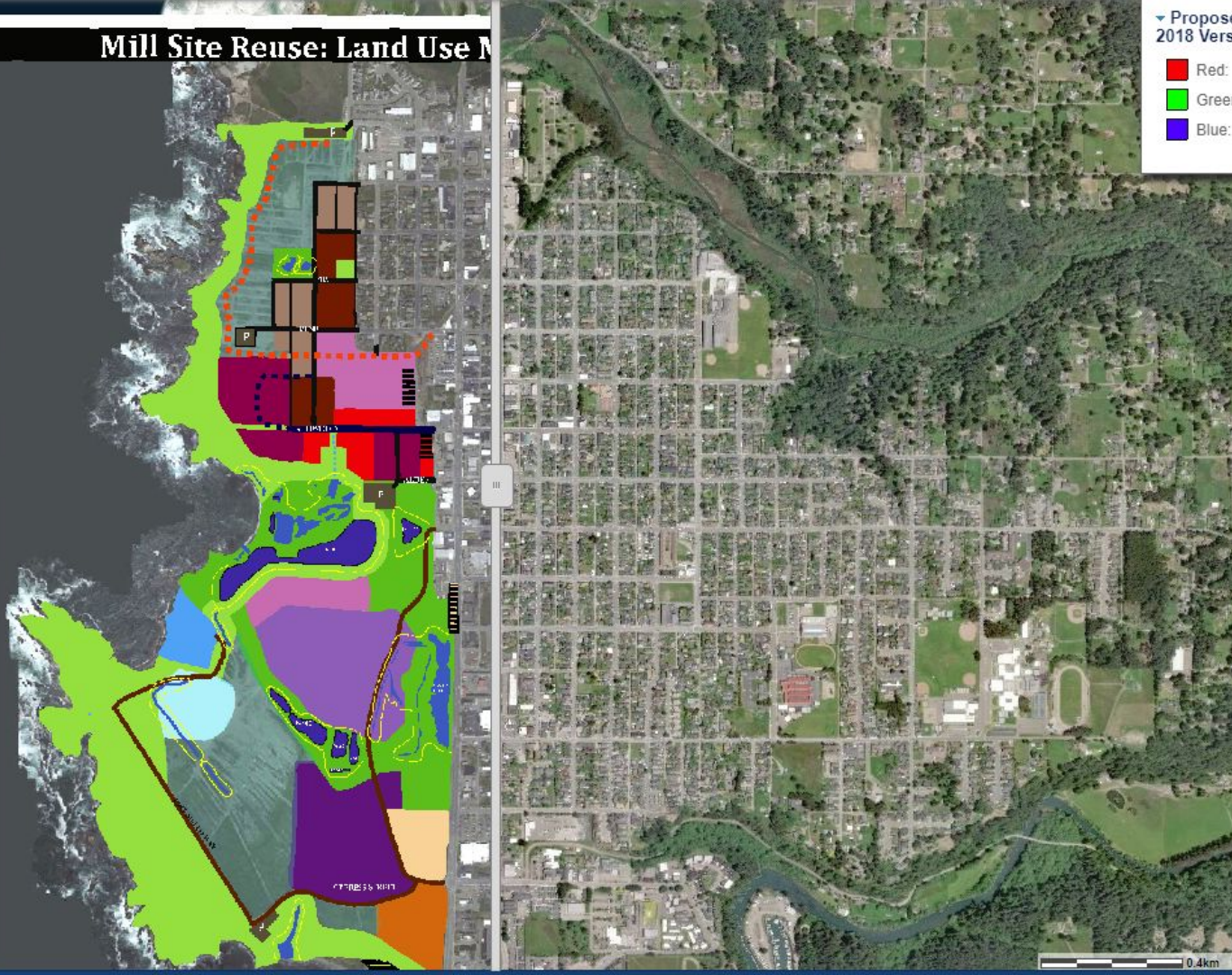
<https://databasin.org/galleries/e3cfe7329ba04dbfb7434618daa919ab>


Map:


<https://databasin.org/maps/7dae0dd2d78742aa8d8f9ebf7bb260a7/active>



Mill Site Reuse: Land Use M




 Drawings


 create

import existing drawings


☒ Primary Wildlife Corridor (Approx.)
(1 line, 3.15 km)




☐ SR1: Move "North Hotel" Back
(1 polygon, 3.96 ha)




☐ SR1: "North Hotel" Moved Back, Result
(1 polygon, 2.37 ha)




☐ SR2: Remove South Hotel
(1 polygon, 1.45 ha)




☐ SR3: Move Tracks and Parking Back
(1 line, 574 m)




☐ SR3: Move Tracks and Parking Back, Result
(1 polygon, 5.26 ha)




☐ SR3: Parking Moved Back
(1 polygon, 2,209 m2)




☐ SR3: Parking P
(1 point)





☐ SR4: Restoration of Open Space Center
(1 polygon, 16 ha)



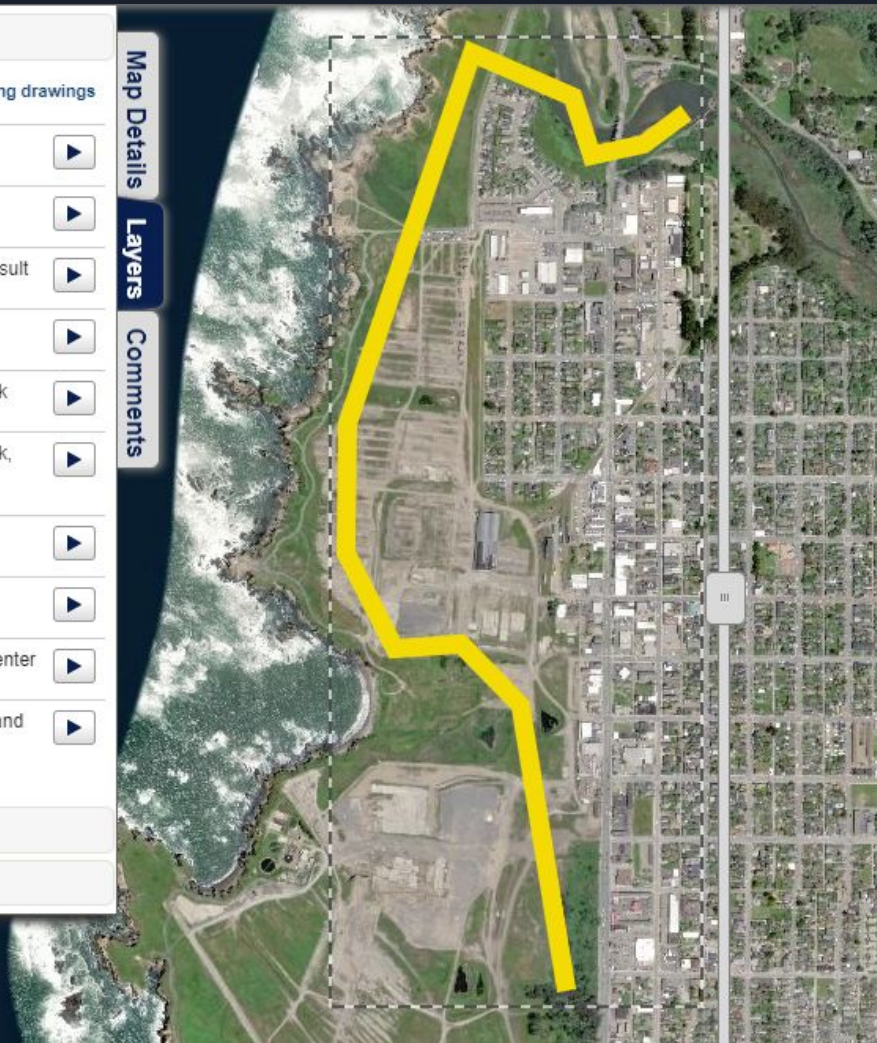
☐ SR5: No Heavy Industrial on Headland Grasslands
(1 polygon, 10 ha)



 Datasets

 Basemaps

Map Details Layers Comments



Drawings



create

import existing drawings

- ☐ Primary Wildlife Corridor (Approx.)
(1 line, 3.15 km) ▶
- ☒ SR1: Move "North Hotel" Back
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- ☒ SR1: "North Hotel" Moved Back, Result
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Datasets

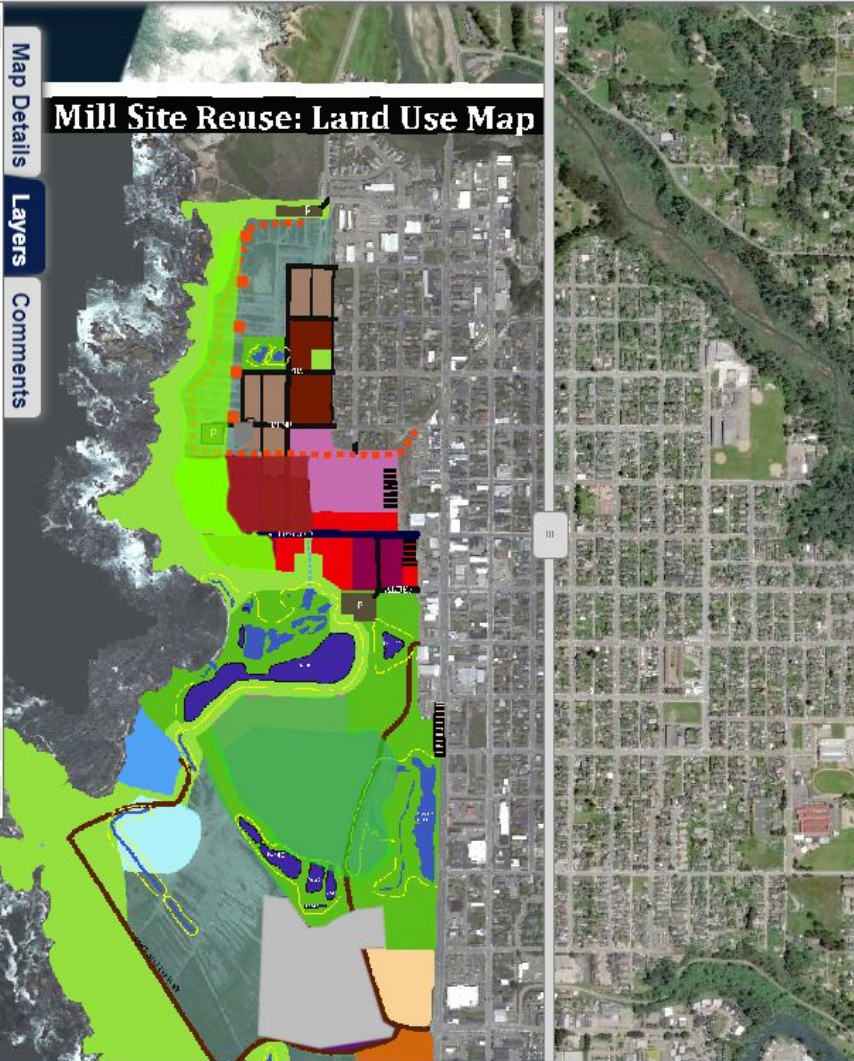
Basemaps

Map Details

Layers

Comments

Mill Site Reuse: Land Use Map





Economic and Environmental Benefits of Biodiversity

1] For references about this paragraph and others, see for example Pimental et al. 1997 "[Economic and Environmental Benefits of Biodiversity](#)", Hernández-Morcillo et al. 2013. "[An Empirical Review of Cultural Ecosystem Service Indicators](#)", and Gascon et al. 2015. "[The Importance and Benefits of Species.](#)"

1. Restoring the ecological function of the site as we propose will not just maintain and restore scenic beauty, but will also add to the appeal of the site. When people see a diversity of animals and plants, they enjoy the nature experience more than if they just see a few plant species