



Scottish Natural Heritage photos

Assessing Visual Impacts of Aquaculture

Shoreline and Coastal Planners Group
June 23, 2016



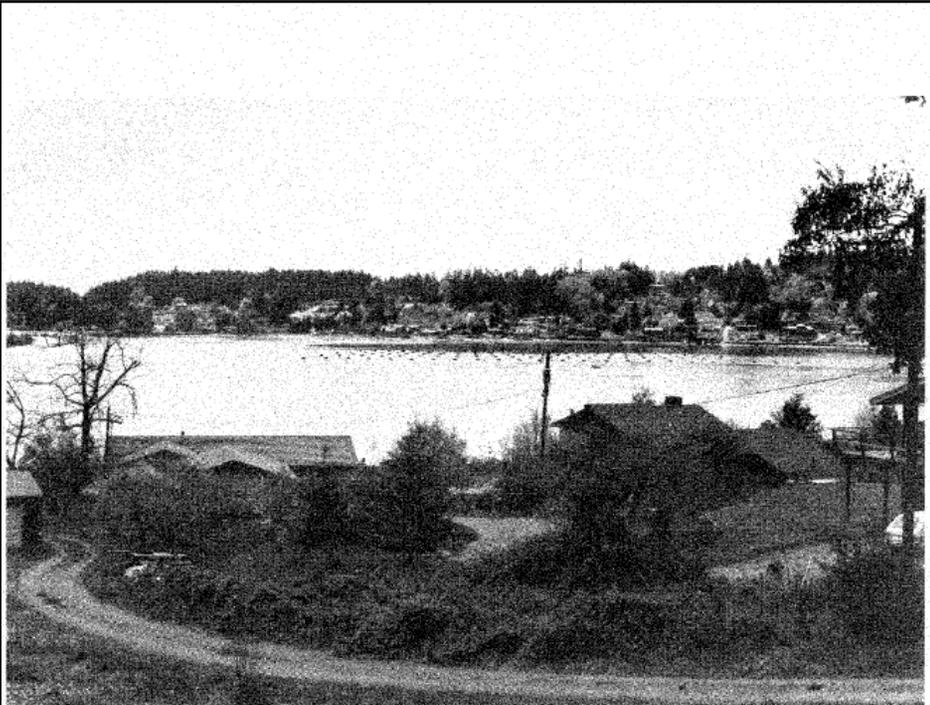
SMA & WAC address visual impacts

- Conservation element in SMPs: Preservation of natural resources, including scenic vistas and aesthetics [RCW 90.58.100(2)(f)]
- Public access includes ability of general public...to view water and shoreline from adjacent locations. [WAC 173-26-221(4)]



AP Photo

Ecology and the Scots offer some help



Aquaculture Siting Study

State of Washington
Department of Ecology

Scottish Natural Heritage
The siting and design of aquaculture in the landscape: visual and landscape considerations

 Scottish Natural Heritage
Dualchas Nàdair na h-Alba
All of nature for all of Scotland
Nàdar air Fèid airson Alba air Fèid

 ASSOCIATION OF SHELLFISH GROWERS

 Scottish Salmon
SSFD

NOAA has graphic tool for visual analysis

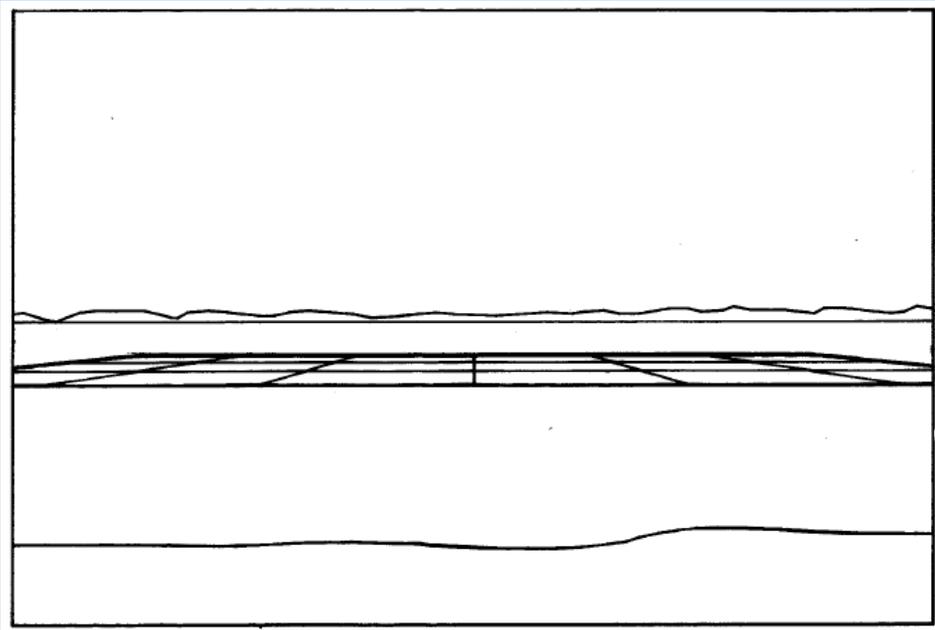


CanVis

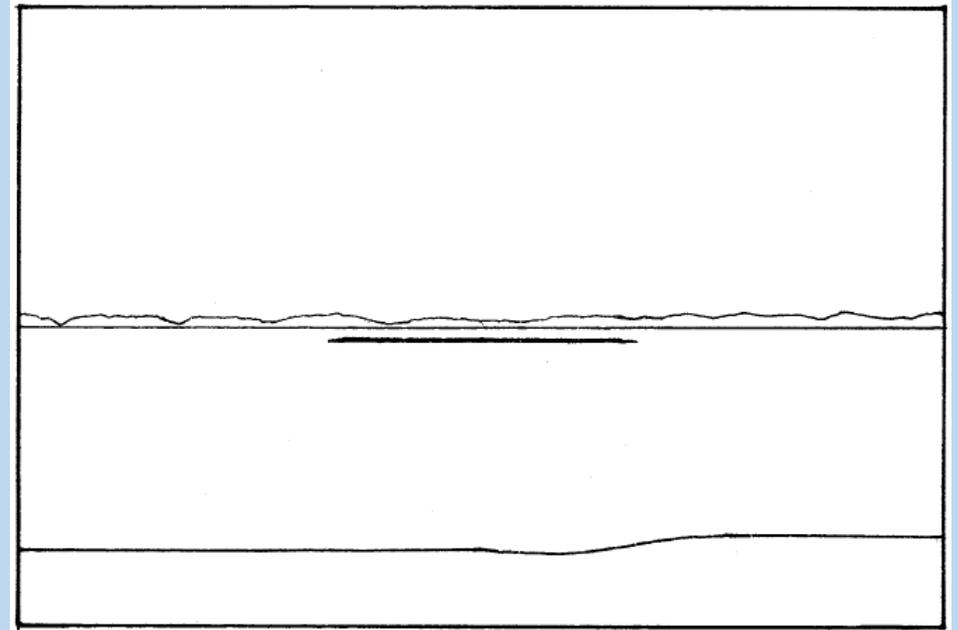
Visualize future scenarios using your photographs and this tool's object icons

<https://coast.noaa.gov/digitalcoast/tools/canvis.html>

Aquaculture Siting Study reviews variables affecting visual impact

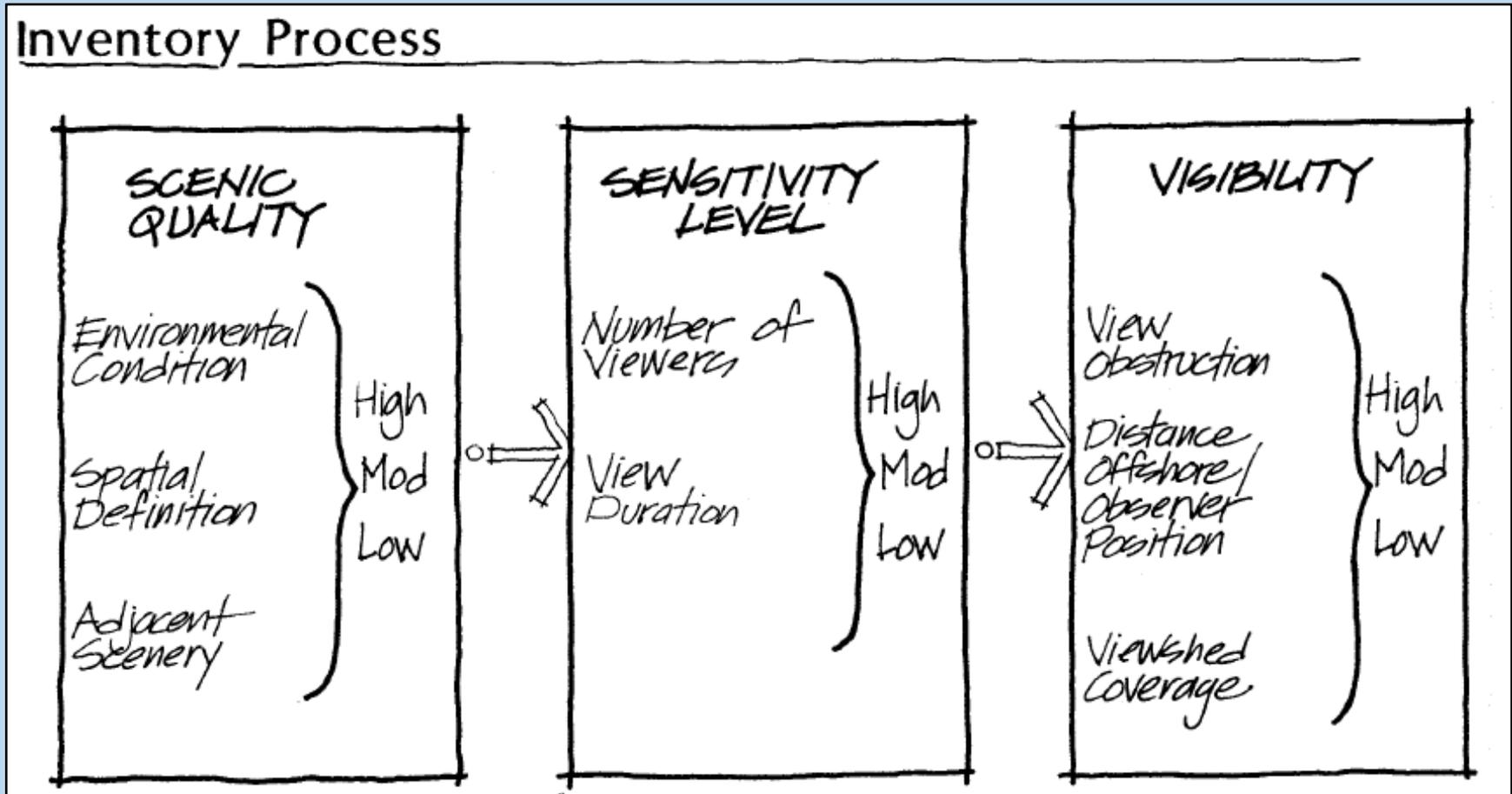


300 feet offshore, observer 30 feet above sea level



1,500 feet offshore, observer 30 feet above sea level

Workbook includes visual and analysis process



Scottish report considers siting and design factors



Scottish Natural Heritage photos

View of site varies with different weather conditions

<http://www.snh.org.uk/pdfs/publications/heritagemanagement/marineaquaculture.pdf>

Views are different from low and high



View from high - facility is visible but doesn't dominate shoreline.
View from low – background absorbs pens.

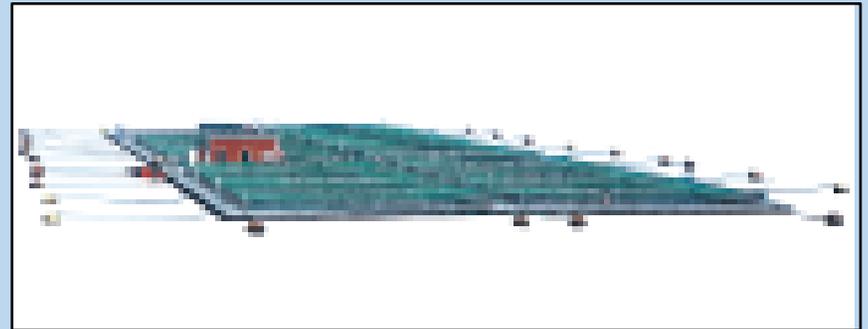
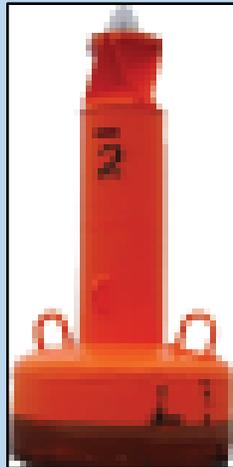


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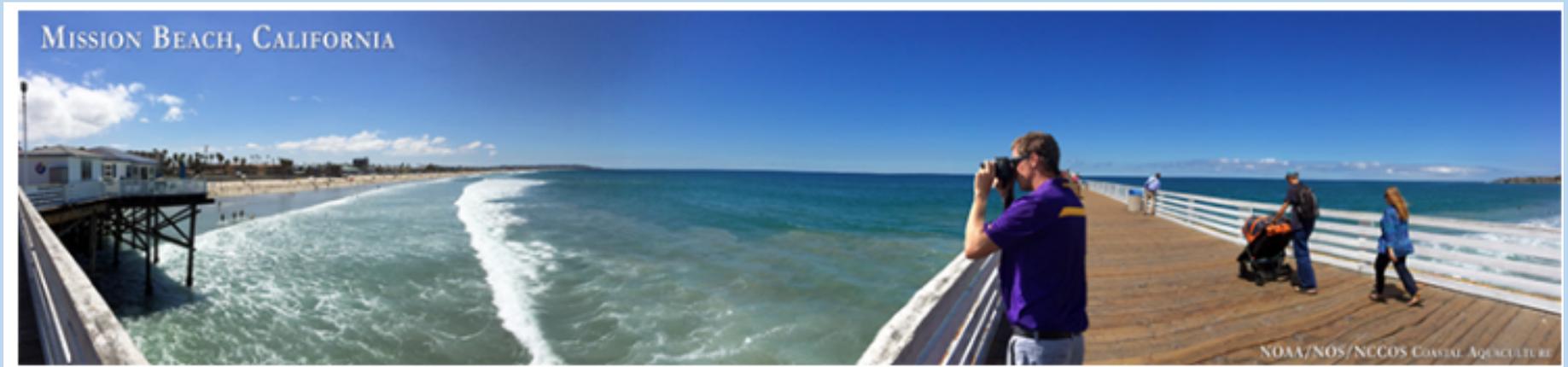
Cluttered look results from variety of diverse elements, colors and forms.

CanVis provides photo libraries to use on local images

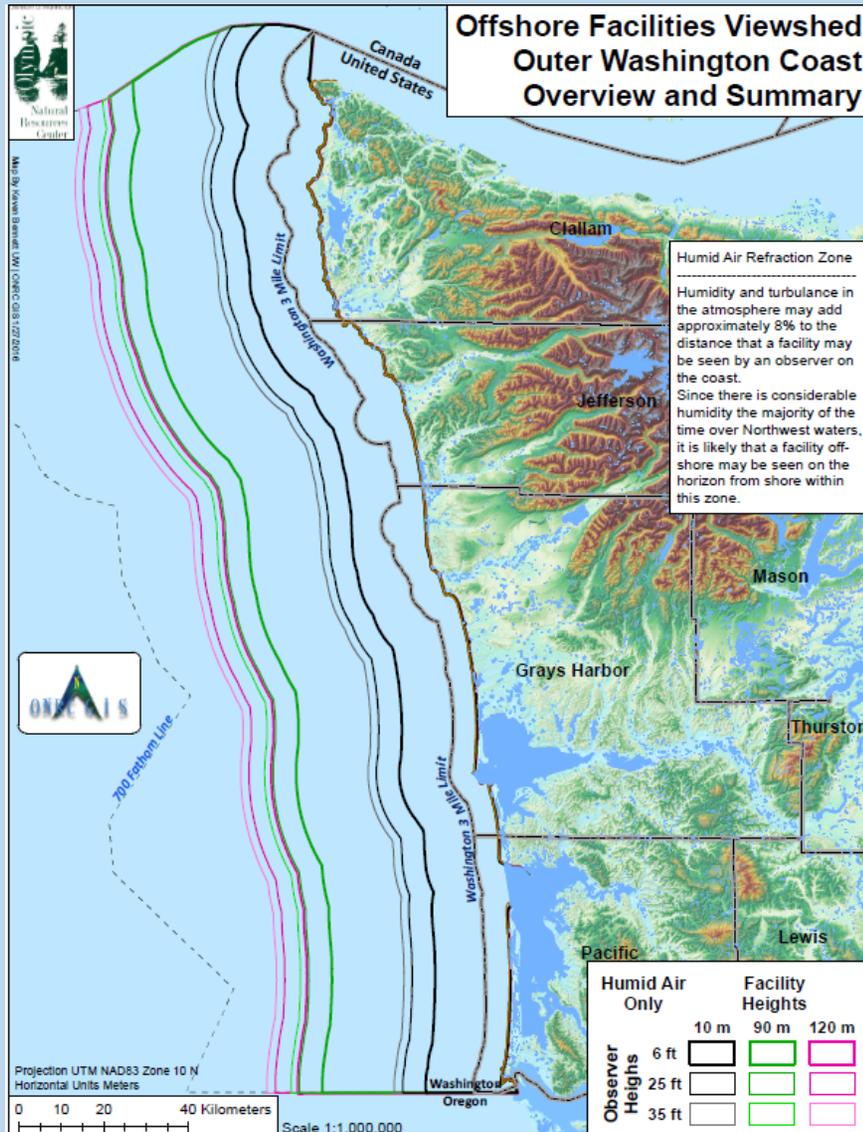
<https://coast.noaa.gov/digitalcoast/tools/canvis.html>



Example: CanVis for aquaculture project



Viewshed analysis – how far can you see?



Offshore wind energy – Marine Spatial Planning

120 meters tall - 60
kilometers, viewer at 30'

10 meters tall – 20
kilometers, viewer at 6'

<http://www.msp.wa.gov/wp-content/uploads/2015/06/CoastalViewshedSummaryMap.pdf>



	Landform	Vegetation	Water	Color	Adjacent	Scarcity	Cultural	Total
Haystack Rock	5	4	2	5	2.5	5	1.5	25

Oregon study assessed scenic quality from viewpoints

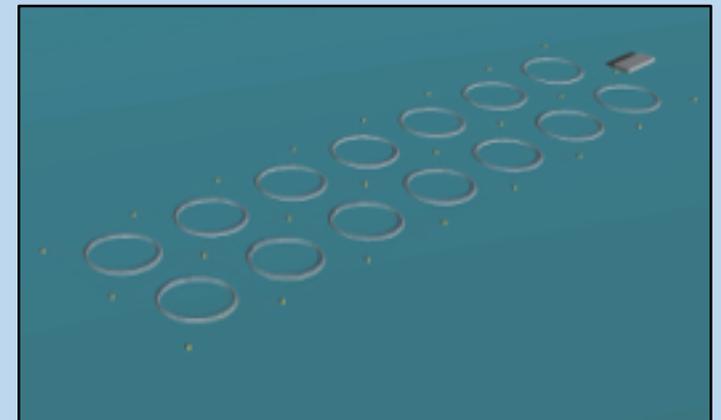
<http://www.oregonocean.info/index.php/home/downloads/ocean-energy/1246-visual-resource-inventory-baseline-report-dlcd-2013>

Example: Visual analysis for proposal currently under review



AGS Port Angeles-East Visual Analysis Report 2016 images

Example— railing and predation deterrence net



3-D CAD aerial view rendering

Example: Visual analysis for proposal currently under review



AGS Port Angeles-East Visual Analysis Report 2016 images

Photograph from Green Point area vantage point with computer model overlay. Pens in black, feed barge in grey.



Same visualization, with pens in white color, feed barge in grey.

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Just a pretty picture to end the presentation

