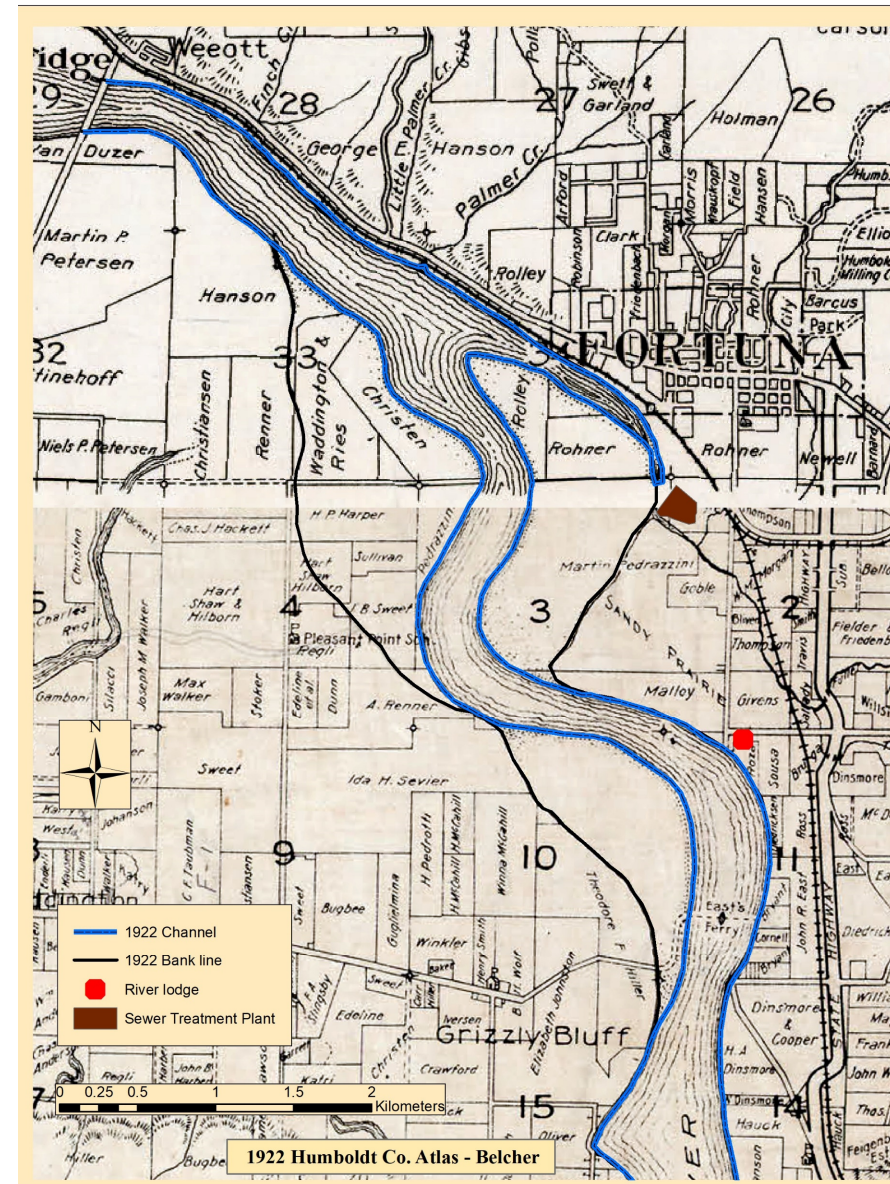


## Lower Eel River – Historical Survey

River Planform changes from 1922 to 2017 documented using aerial photographs from USGS , Belcher's Humboldt County Atlas, and GPS survey.

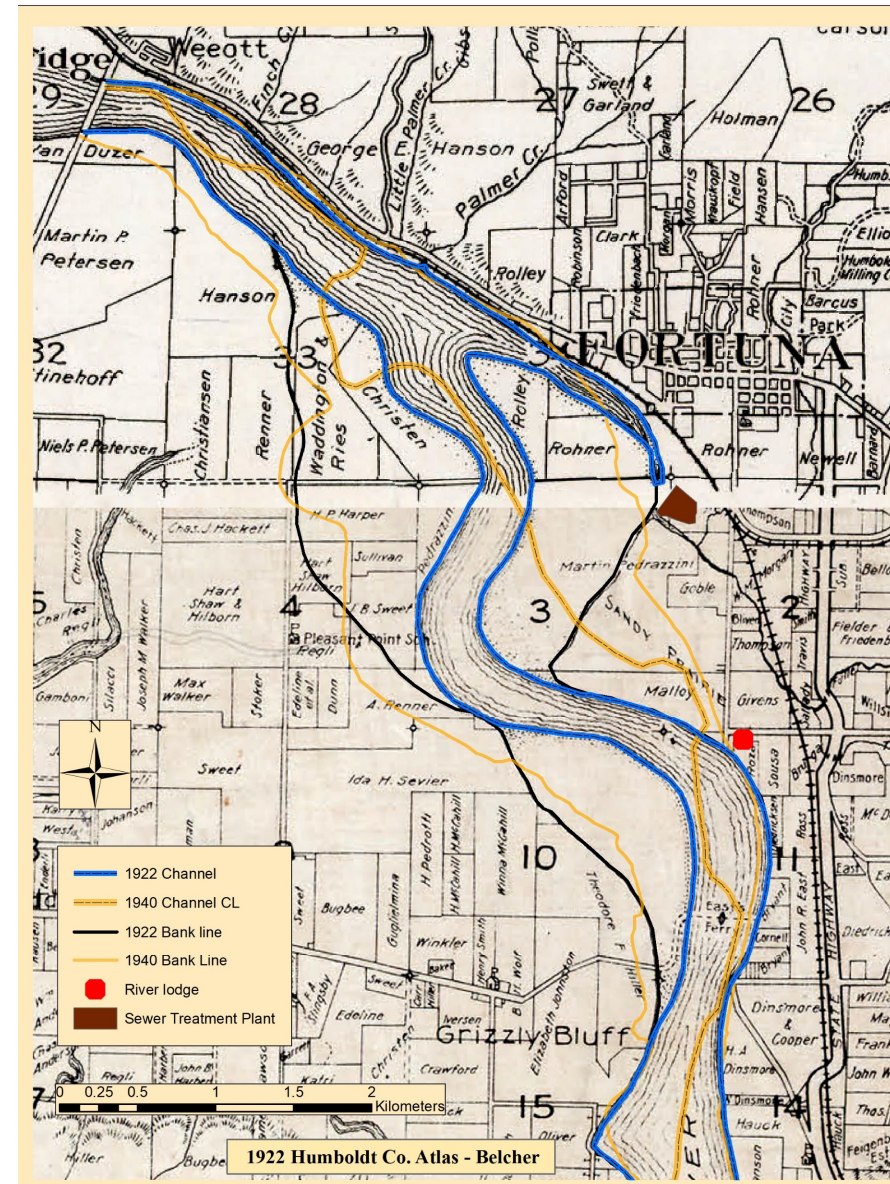
Three main eras in this part of the Eel's History:





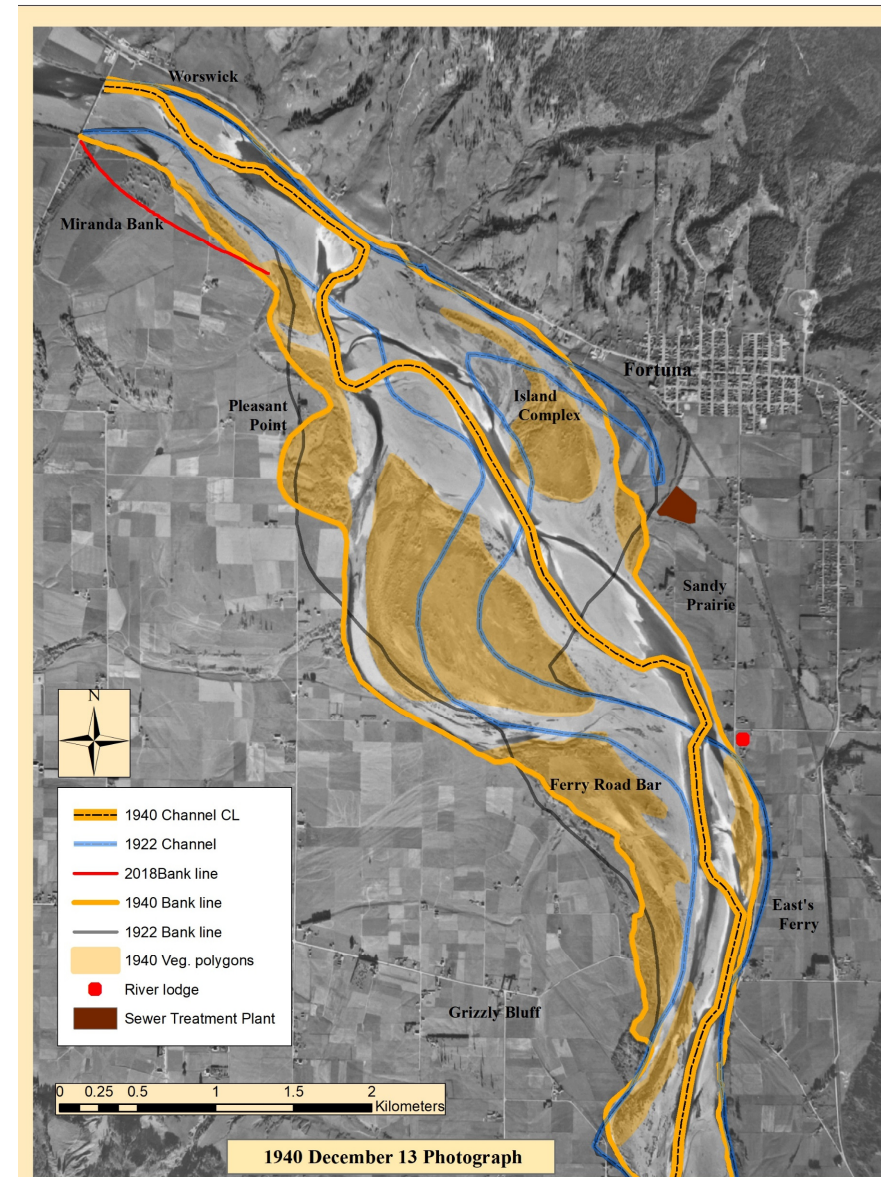
Three main eras in this part of the Eel's History:

- 1) Erosion of the meander between Pleasant Point and Sandy Prairie Point  
-ends with construction of Fortuna levee 1959



Three main eras in this part of the Eel's History:

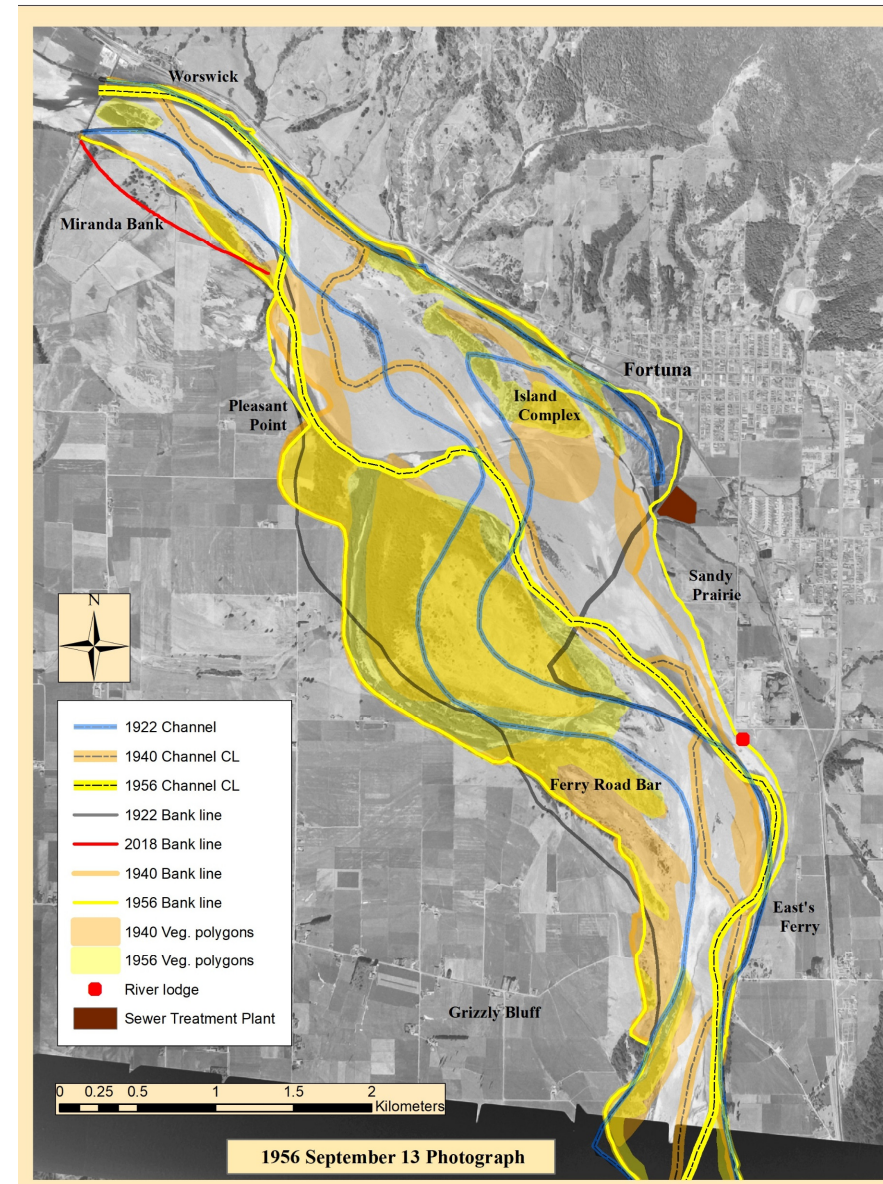
- 1) Erosion of the meander between Pleasant Point and Sandy Prairie Point
  - ends with construction of Fortuna levee 1959
  - 1940 image shows loss of Sandy Prairie Point and Pleasant point





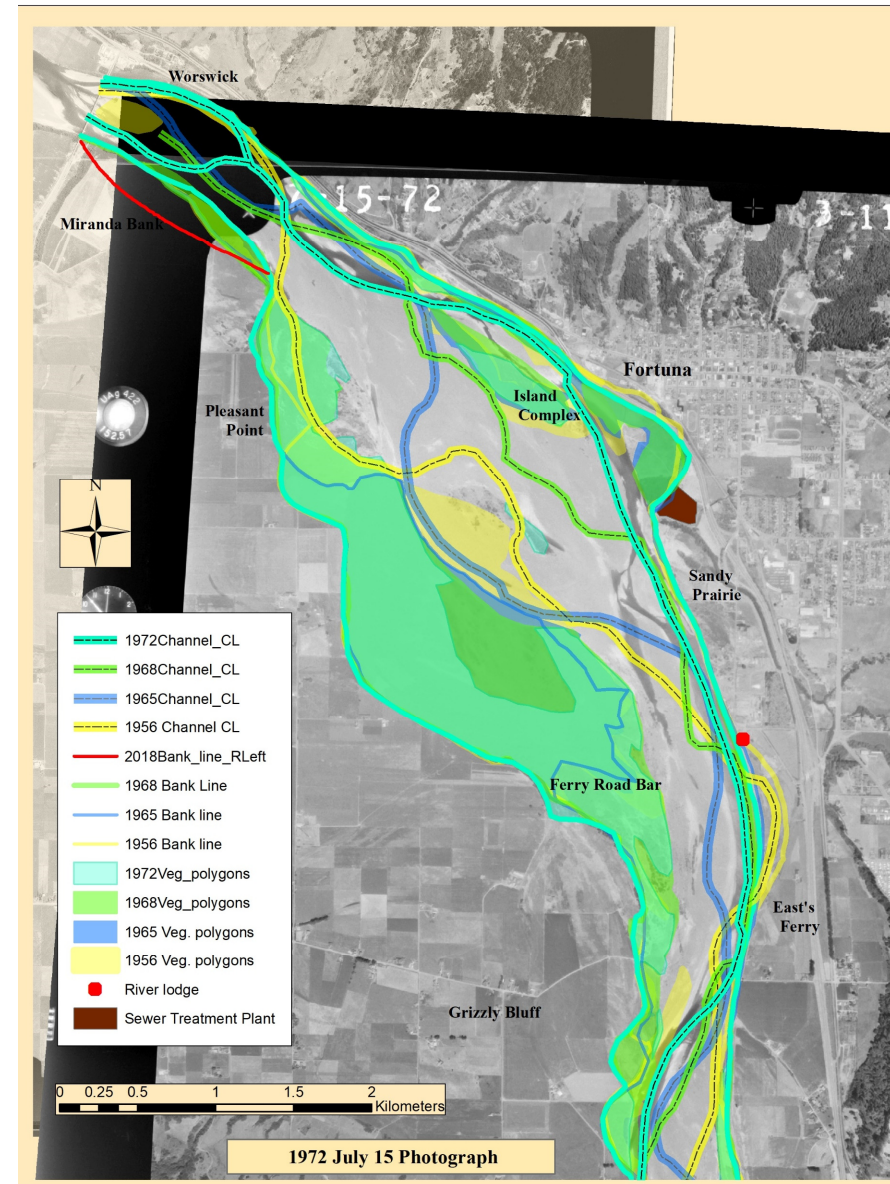
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  - ends with construction of Fortuna levee 1959
  - 1940 image shows loss of Sandy Prairie Point and Pleasant point
  - 1956 image shows erosion of Fortuna Bank
- 2) The second era goes through the mid 1970's as the river chokes with sediment from the 1964 and subsequent events
  - The channel is highly braided
  - The channel gradually moved to the outside of the bend





Three main eras in this part of the Eel's History:

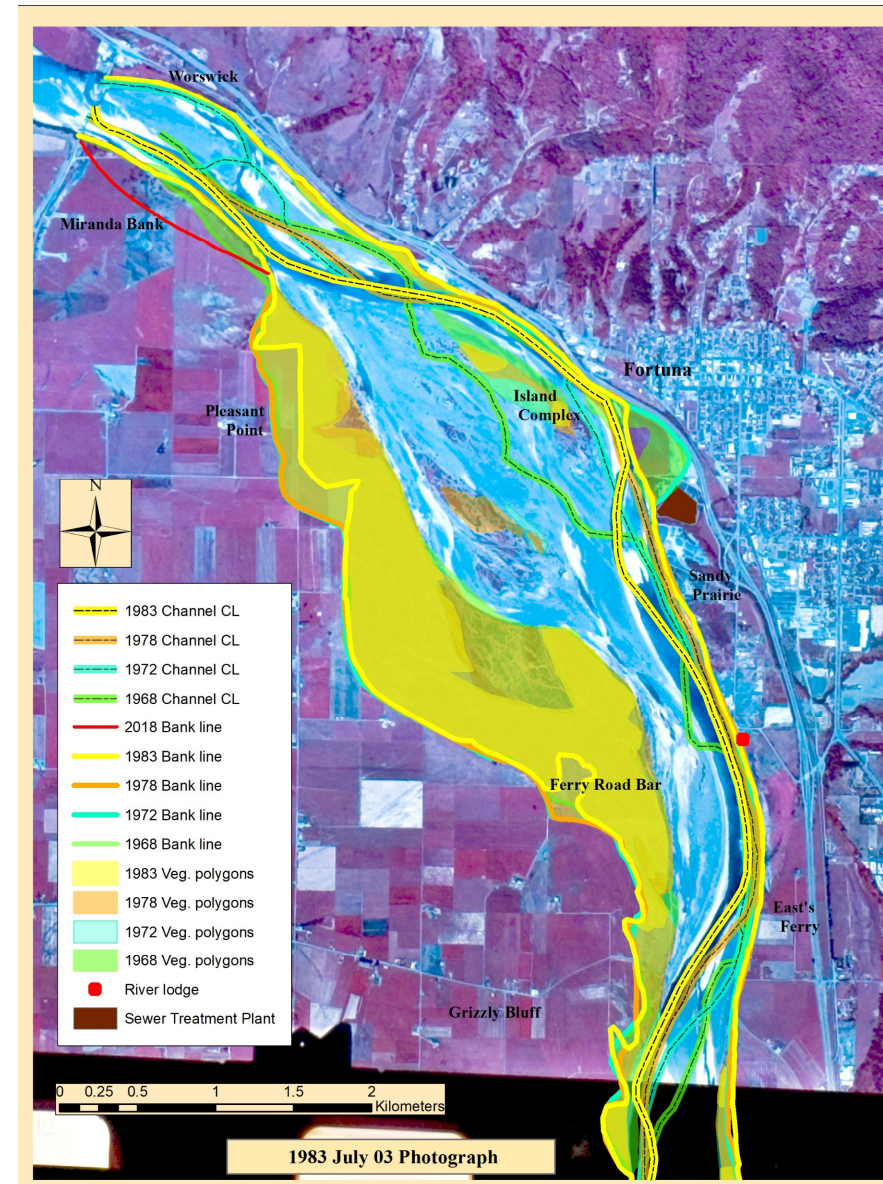
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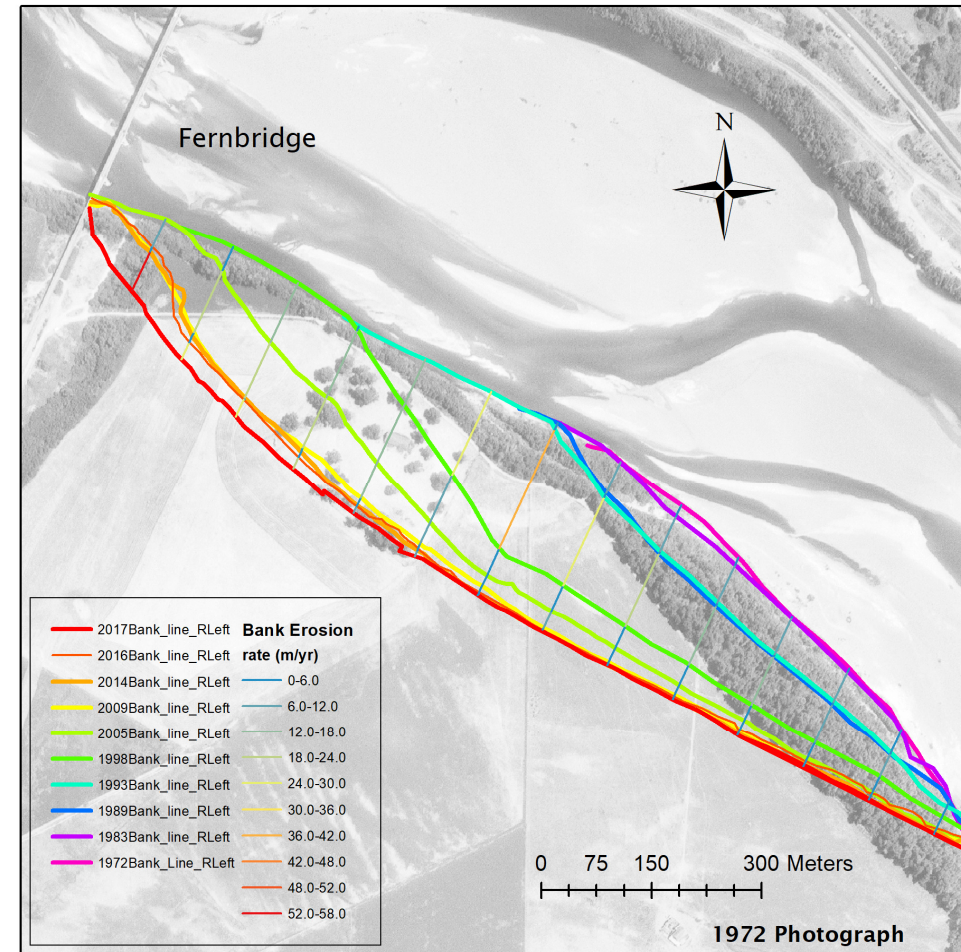
- The channel is highly braided
- The channel gradually moved to the outside of the bend

3) The final era continues to the present with the river settled into its new configuration entering the corner east of the Old Island then crossing to the Miranda Bank side, eroding it.



Three main eras in this part of the Eel's History:

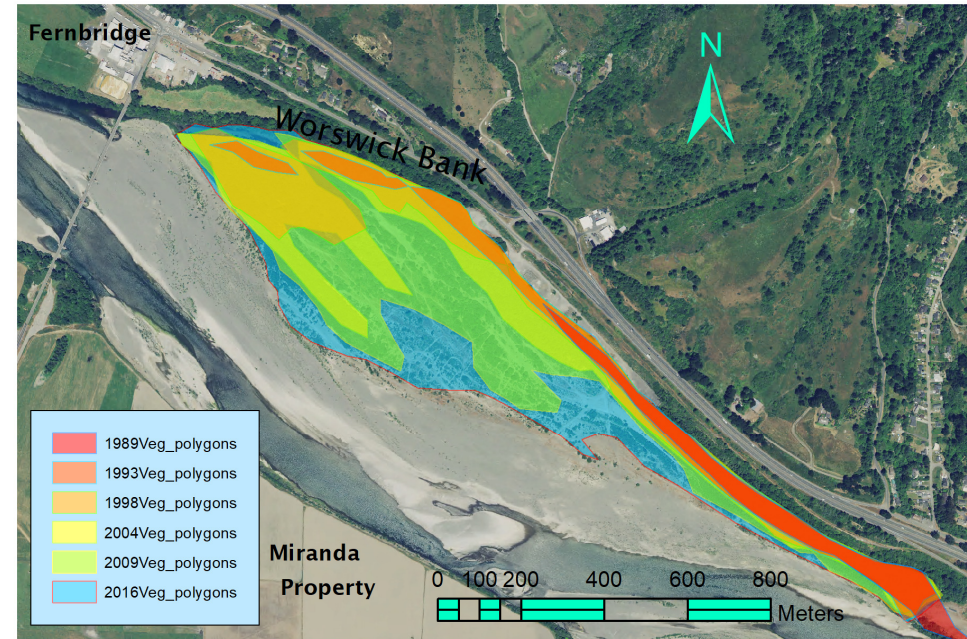
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  - The Miranda bank is eroded





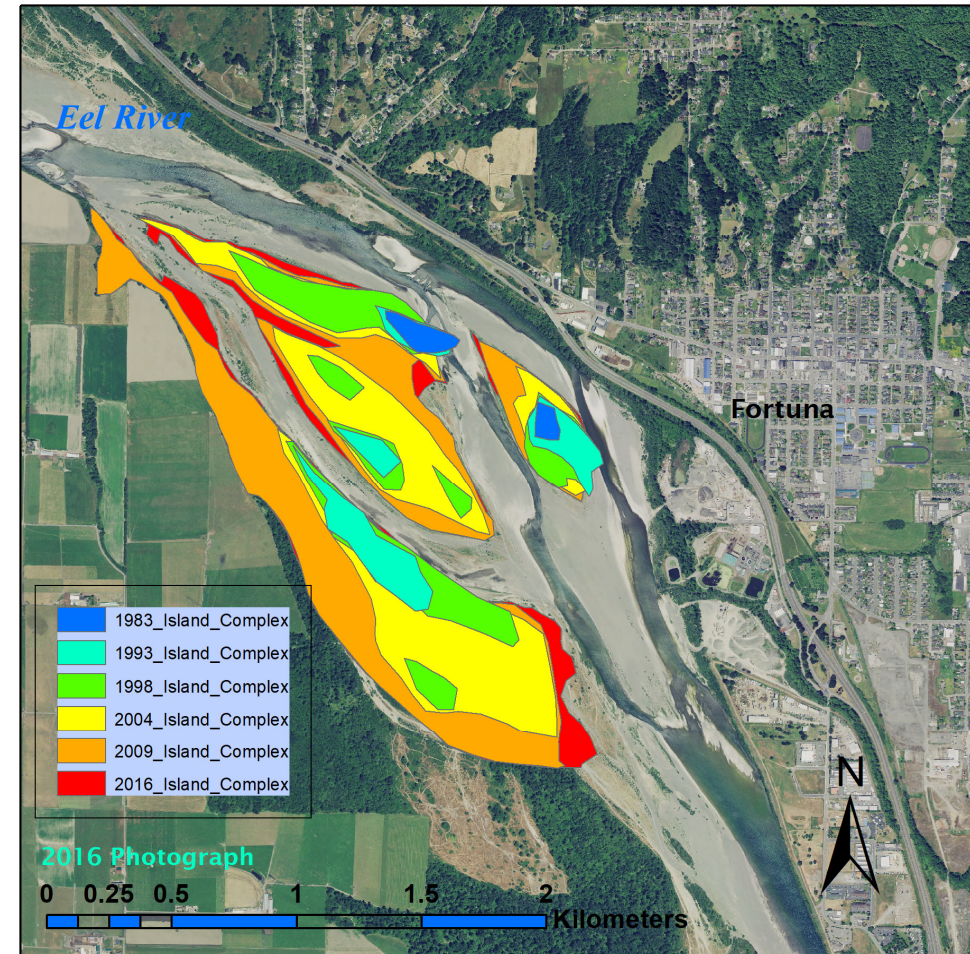
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  - The Miranda bank is eroded
  - The Worswick Bar grows into a point bar



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  - The channel gradually moved to the outside of the bend
- 3) The final era continues to the present with the river settled into its new configuration
  - The Miranda bank is eroded
  - The Worswick Bar grows into a point bar
  - The Island complex expands the north end of the Ferry Road Bar







Here we are today:

- 1) The Miranda Bank continues to erode.
- 2) On the Worswick Bar and the Island Complex the riparian vegetation continues to expand in area and density.
- 3) The sediment plug in the lower river has filled all the holding water for migrating fish between tide water and the 12<sup>th</sup> street pool.

