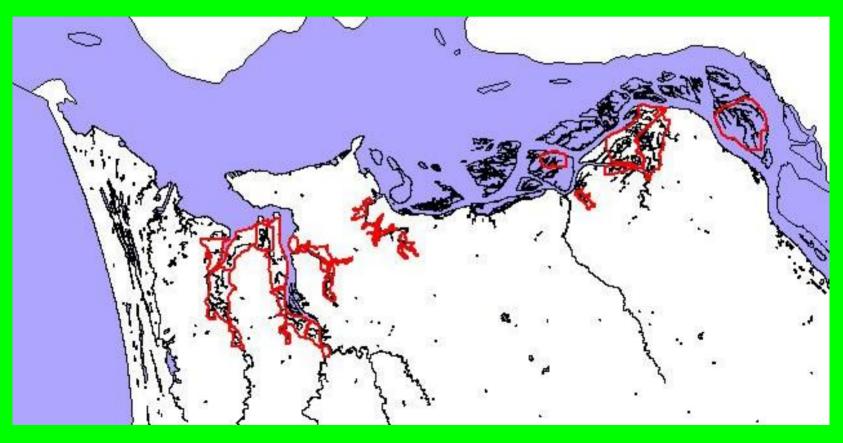
## Dikes and Districts

- Description and History
- Economic Costs and Benefits
  - Habitat Restoration Efforts
    - The Future

# Description

13 Districts shown in red Total protected area = 10,625 acres



### History

- Most constructed in 1930s
- Diking Districts formed in 1937-39
- Major upgrades by U.S. Army Corps in 1933-39
- Agreement with U.S. Army Corps

## History

### Tide gates



### Fish Friendly Tide gates

- Knappa/Brownsmead Warren Slough, Grizzly slough, Blind Slough
- Lewis and Clark River Green Slough

Resistance to tide gate modifications

## History Flow improvement





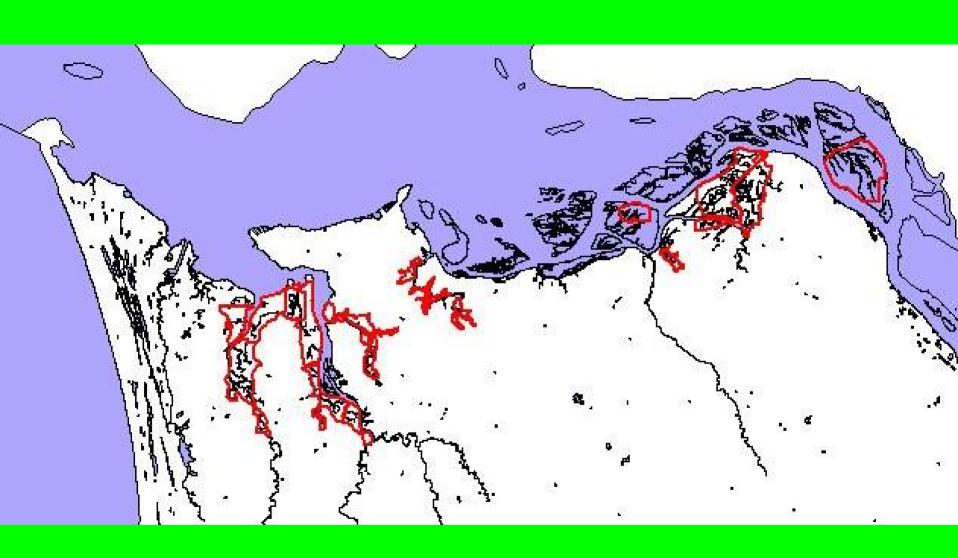
• Brownsmead slough reconnections





### **Economic Benefits**

- Agriculture
- Industrial/Business Development
- Residential Development



#### **Economic Costs**

- Dike Maintenance
- Tide gate Maintenance
- District capacity to maintain dikes variable

#### Habitat Restoration Efforts

- Intentional
  - Fee Dike Breach
  - Fort Clatsop Restoration
  - City of Seaside Restoration
- Unintentional
  - Columbia Land Trust Property, Walluski
  - Karlson Island

### The Future

- Dike failures
  - Diking District 12 breach
- Planned projects
  - Youngs River Wetlands Mitigation Bank
  - Svenson Island
- Likely opportunities
  - Walluski River
  - John Day River
  - Warren Slough
  - Railroad grade impoundments
  - Tenasillahe Island