



Lower Columbia

Estuary
Partnership

Establishing Target Acres for Habitat Recovery in the Lower Columbia River and Estuary, cont'd

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Science Work Group
March 2015

Summary of Targets Process

- **November 2013 SWG. New Strategy for Baseline Values:**

For each Priority Habitat within a Reach, set baseline target acreage of:

30% of the historic extent by 2030

40% of the historic extent by 2050

In all Reaches except D, there is sufficient 'Recoverable' habitat to achieve these targets.

We believe these acreages provide adequate **Representation** of key habitats to support species of interest

Baselines Established (Nov '13 SWG)

Reach	All PH: Hist. Acres	All PH: Target 30% of Hist. Acres	All PH: Present Acres	Recovery required to meet 30% baseline (30% of total historic extent of that Priority Habitat (PH))						
				Total Deficit, acres	Deficit Acres PH 1	Deficit Acres PH 2	Deficit Acres PH 3	Deficit Acres PH 4	Available Recoverable Habitat (acres)	Margin: Recov. – deficit (acres)
A	11,609	3,483	1,699	1,784	929	854	--	--	10,062	8,278
B	22,442	6,733	10,122	0	-251	-3,138	--	--	10,417	10,417
C	25,629	7,689	3,579	4,110	1,937	2,173	--	--	18,837	14,727
D	16,609	4,983	5,108	1,177	638	539	-950	-353	1,098	-79
E	15,686	4,706	4,236	1,690	1,157	-1,220	338	195	9,173	7,483
F	52,614	15,784	17,872	939	-319	836	-2708	103	24,567	23,628
G	29,719	8,916	9,974	683	-792	683	-949	--	2,510	1,827
H	3,342	1,003	1,132	0	-129	--	--	--	546	546
Total	177,650	53,295	53,722	10,383					77,210	66,828

For all negative deficits (values in green), we will attempt to ‘hold the line’ for these habitats, which already meet the 30% target criteria.

Overall negative margins (right hand column) shown in red indicate not enough Recoverable Habitat to meet overall targets for that Reach

Summary of Targets Process, cont'd

- **April 2014 SWG. Further Characterization of Priority Habitat Distribution by Reach:**
 - ✓ Amount restored
 - ✓ Amount currently protected
 - ✓ Amount of public land available for restoration/protection
 - Maximum and average patch sizes
 - Maximum and average Euclidean distance between patches
 - Maximum and average distance between patches along linear hydrologic path
- Preliminary Results were inconclusive for landscape Patch Analysis

Summary of Targets Process, cont'd

- **March 2015 SWG:**

Additional Characterization of 'Recoverable Habitats'.

Create additional maps to help analyze:

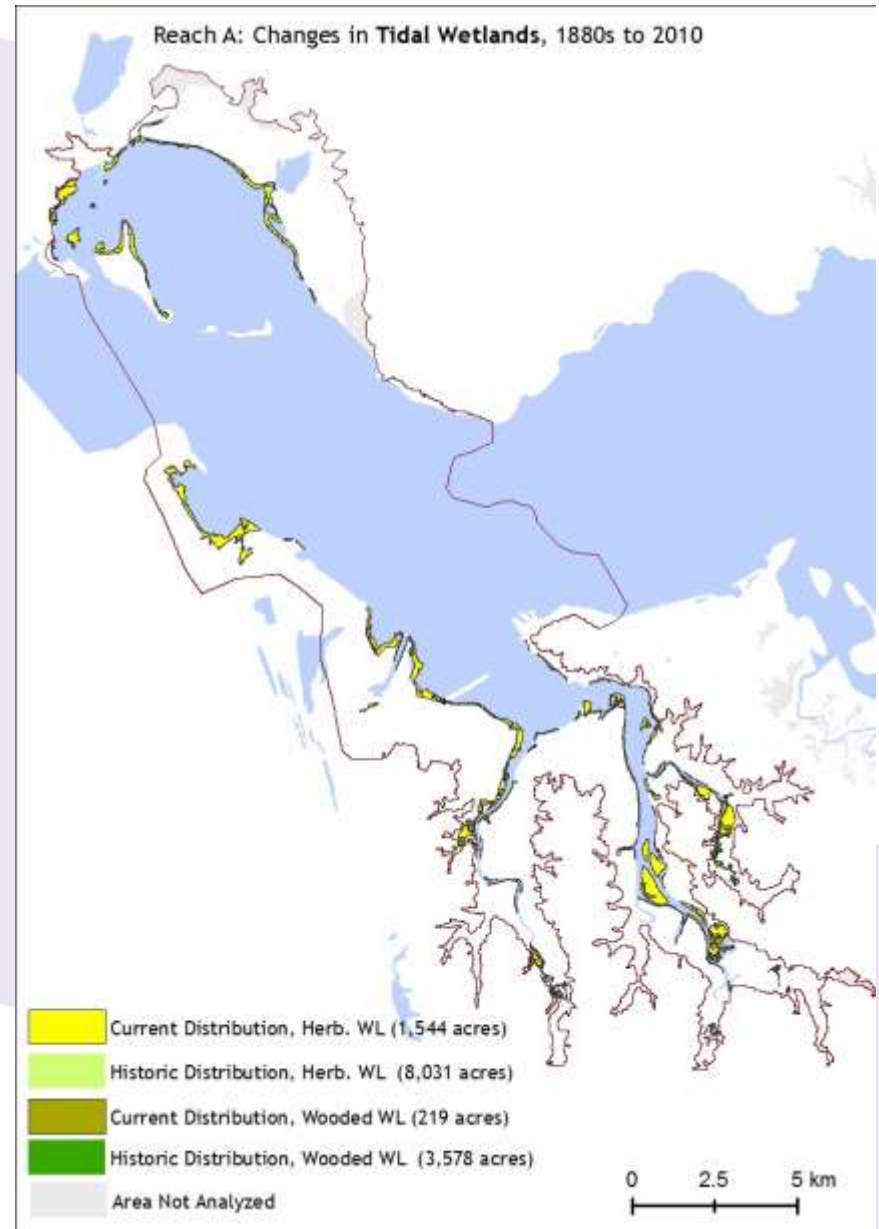
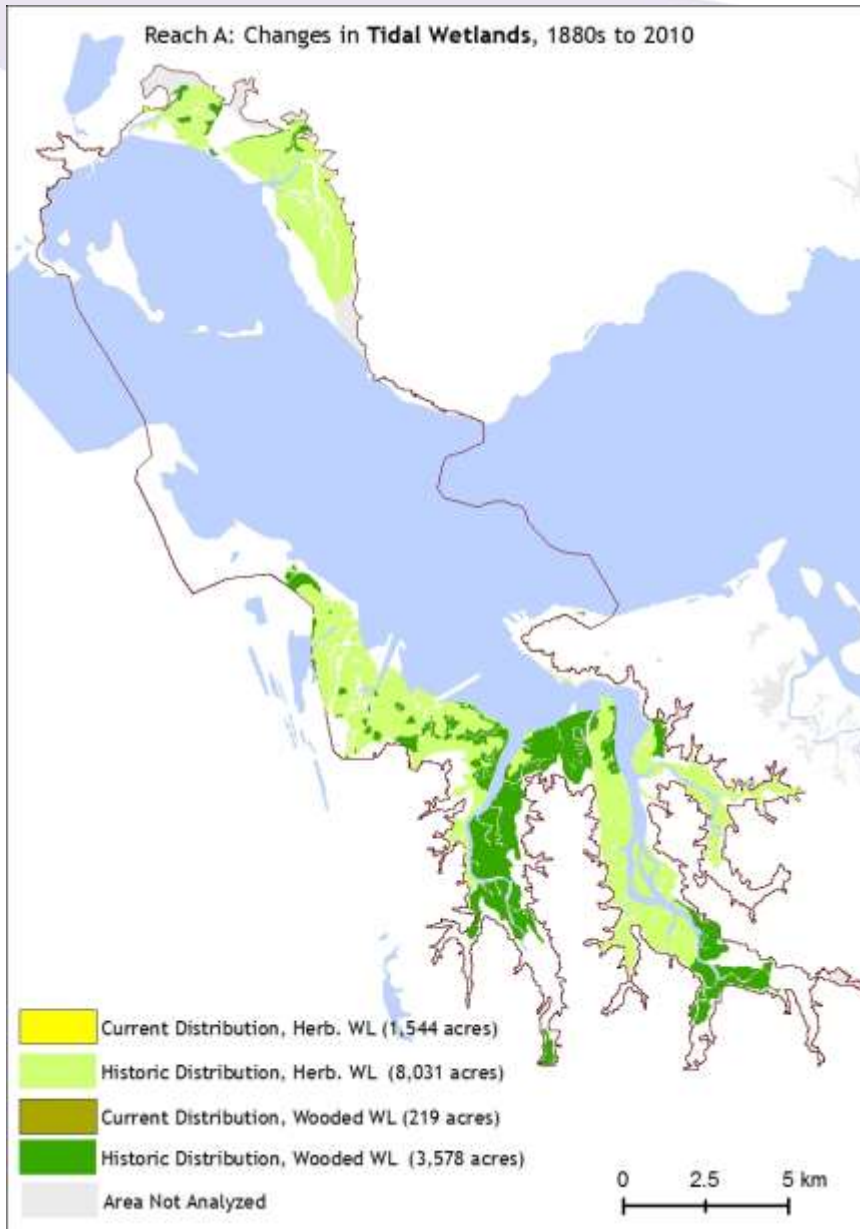
- **Redundacy:** Do we have adequate habitat coverage within different Reaches or regions. Are there critical spatial gaps that are not being addressed?

Discuss potential focus areas for restoration within each Reach

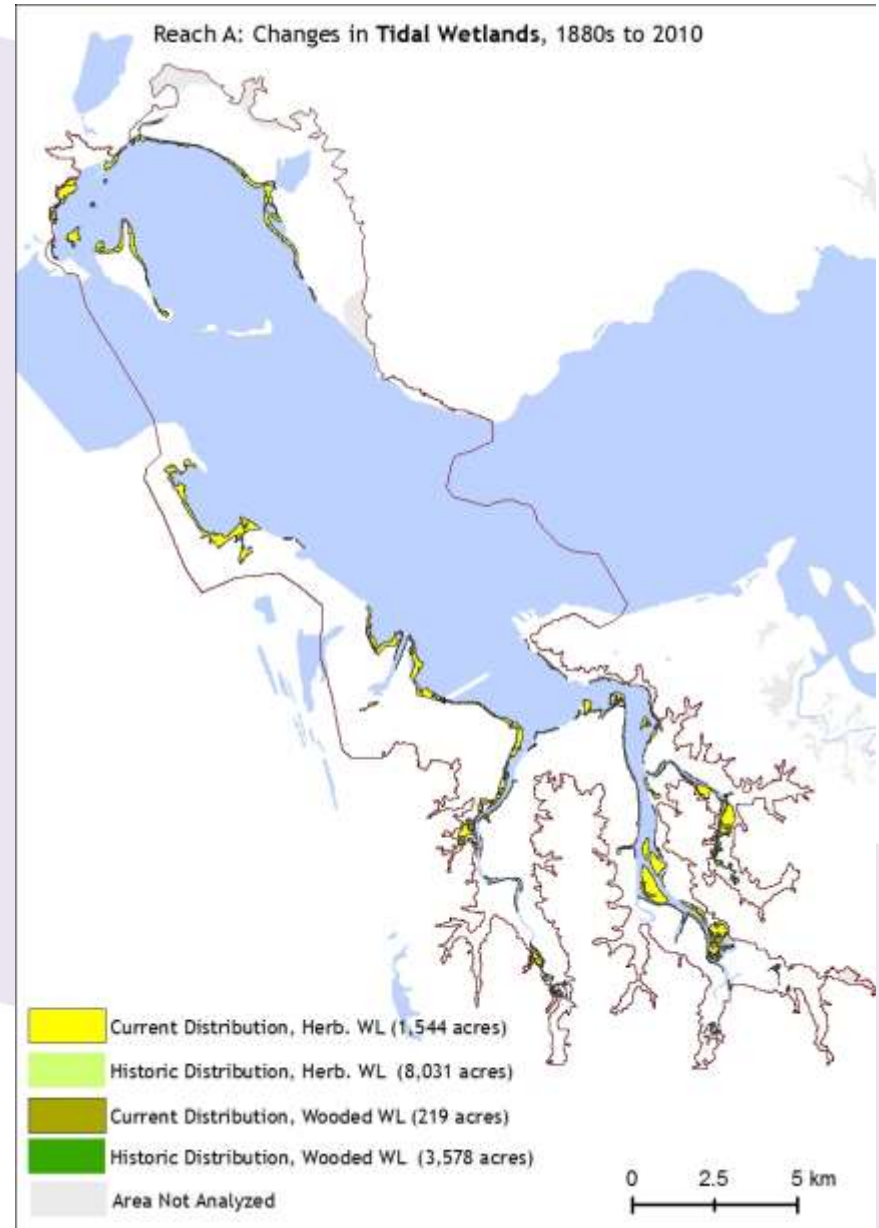
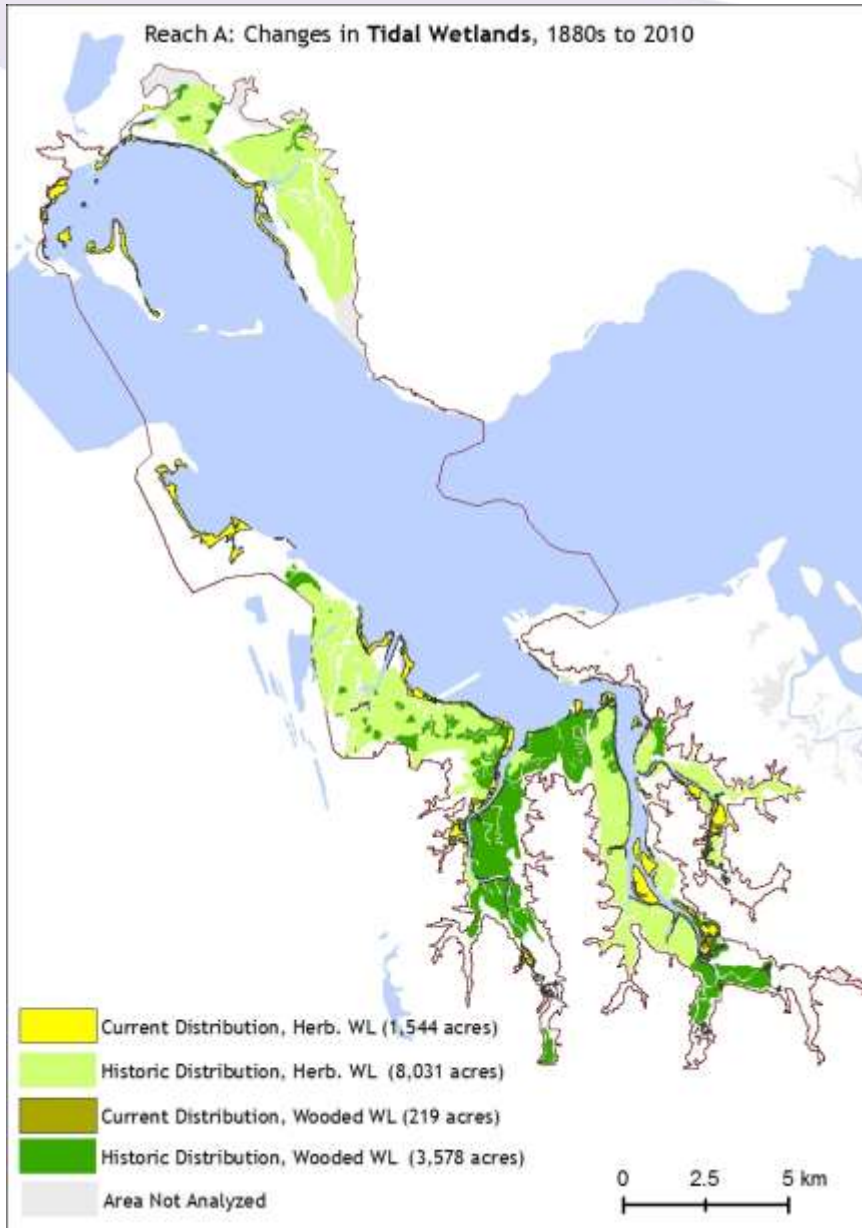
- **Resiliency:** Based on surrounding land use:
 - Will existing Priority Habitats maintain ecosystem function?
 - Which are the best areas of Recoverable Habitat to restore?

Discuss the use of an updated 2006 PNNL Landscape Disturbance Model to characterize habitat resiliency.

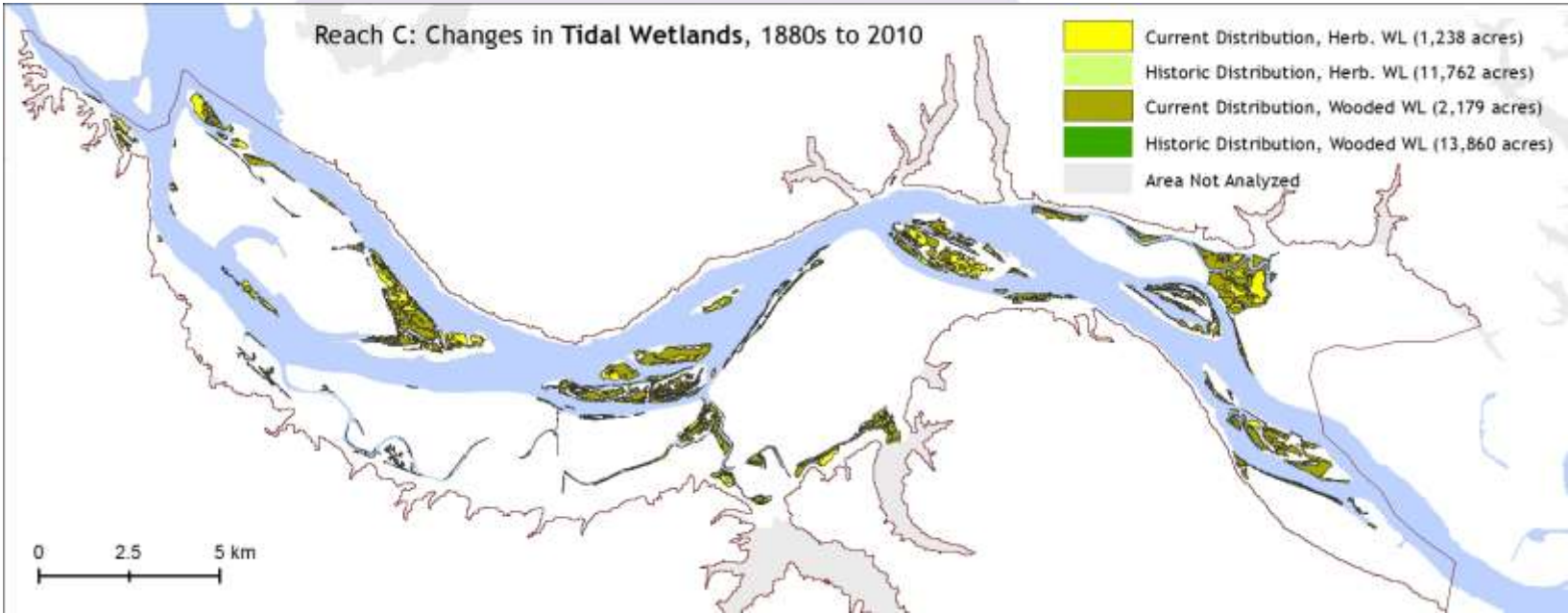
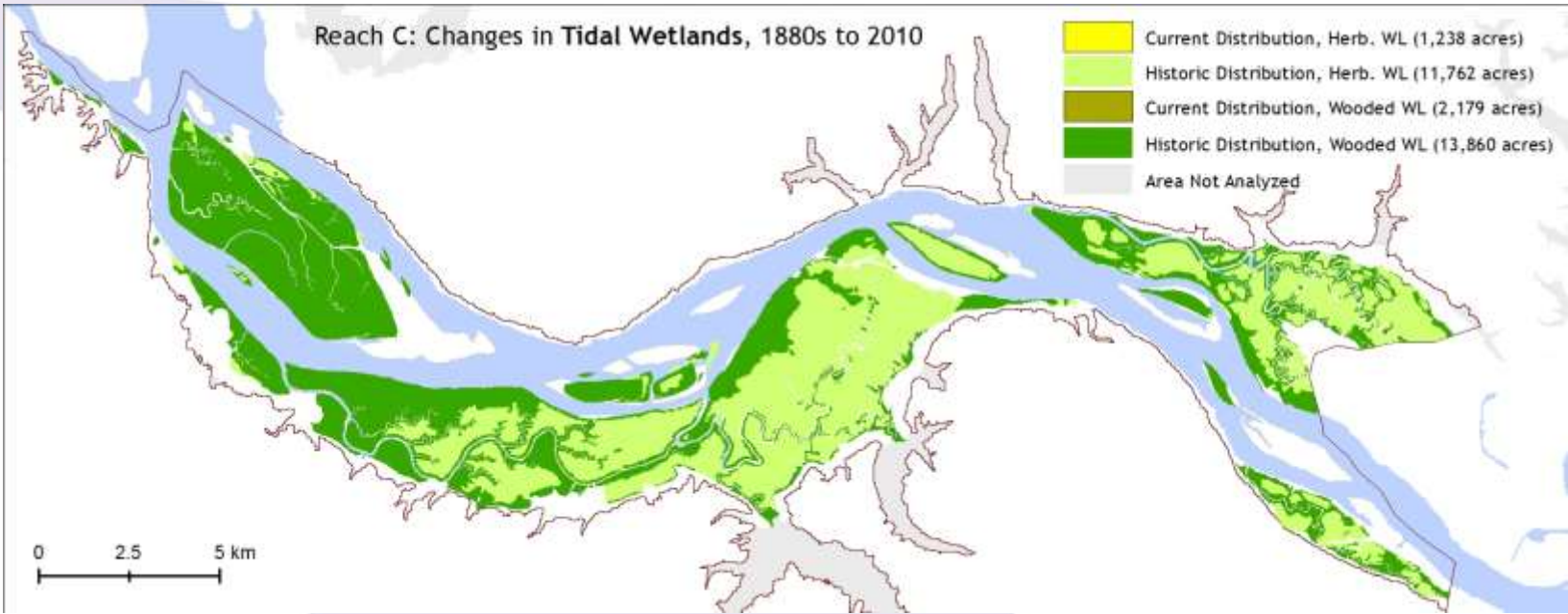
Reach A: Historic vs. Current



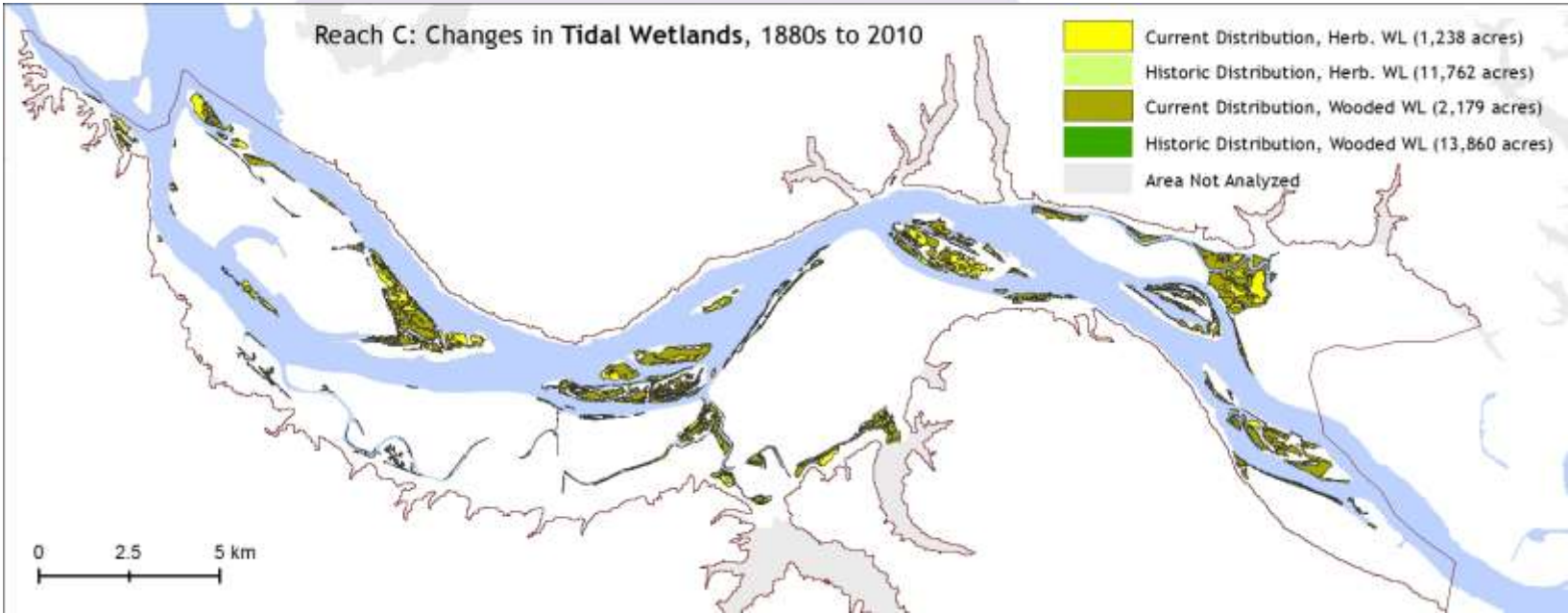
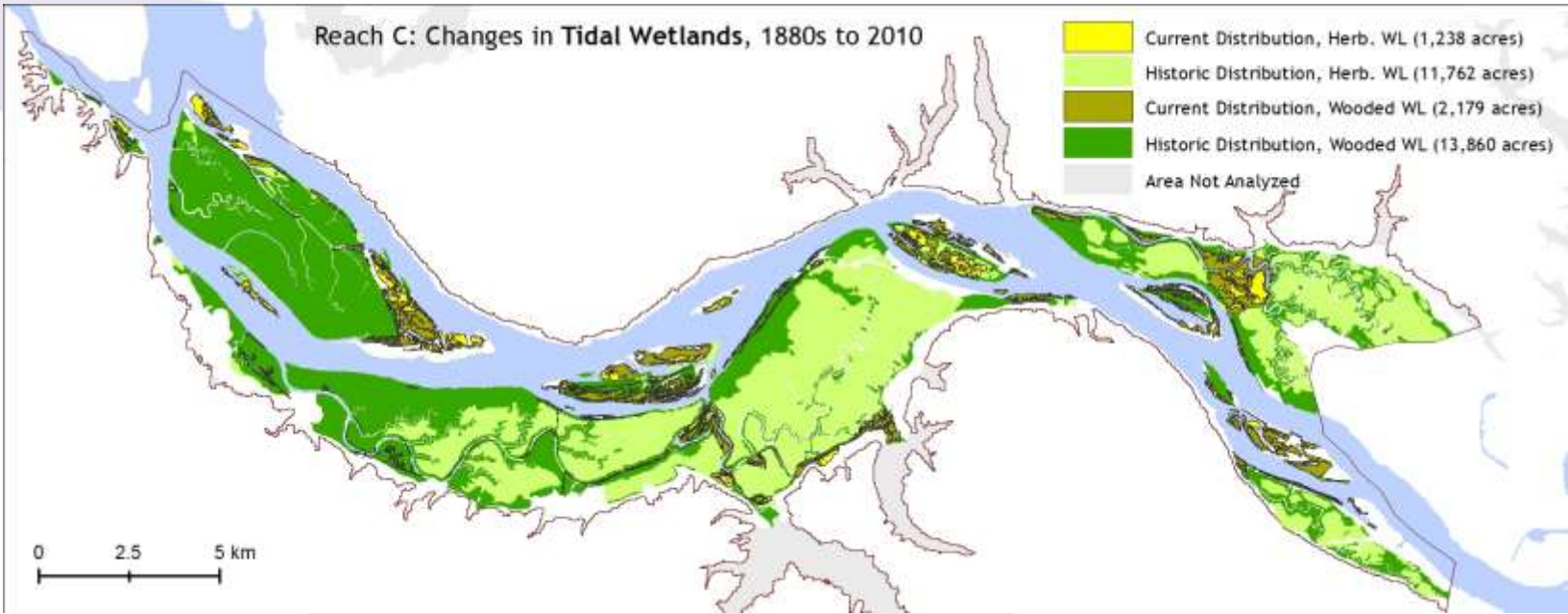
Reach A: Historic vs. Current



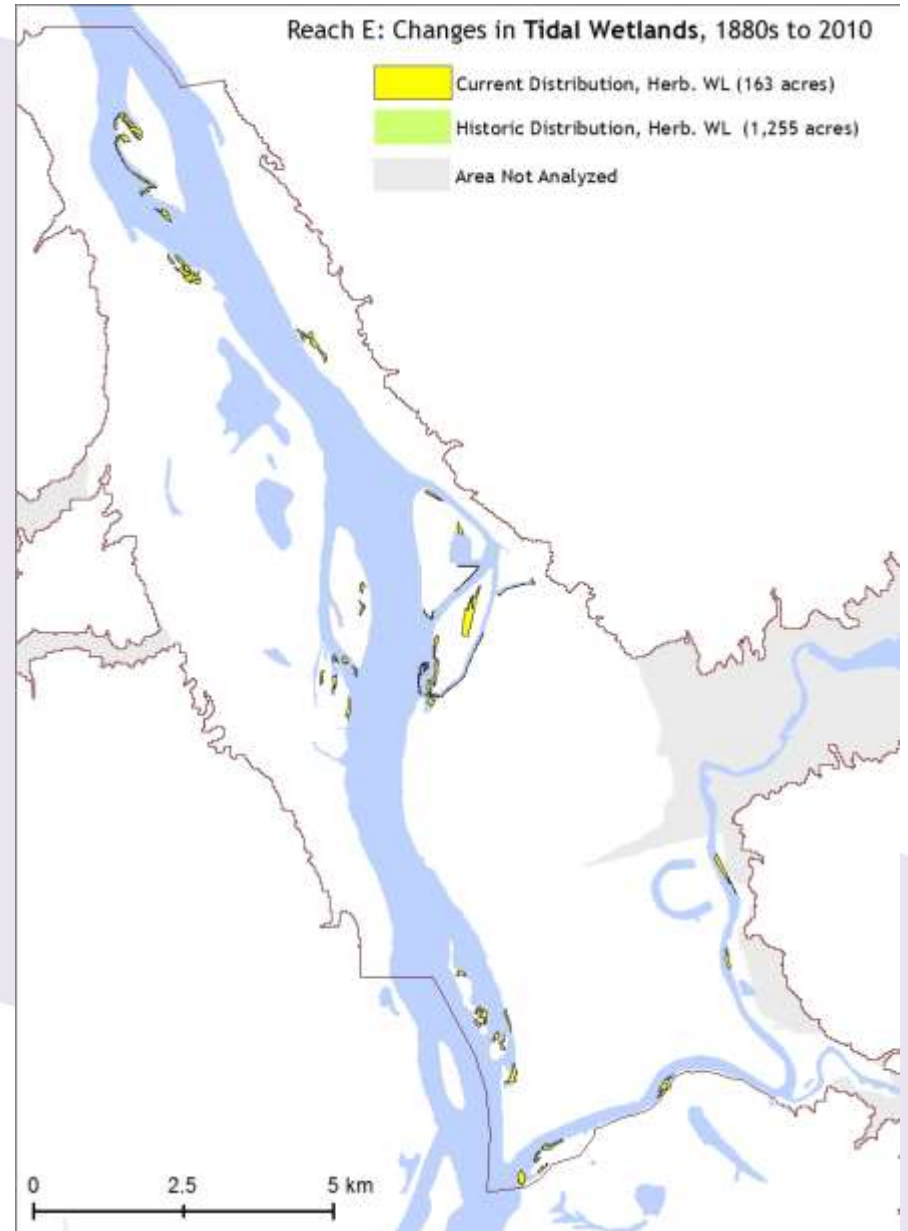
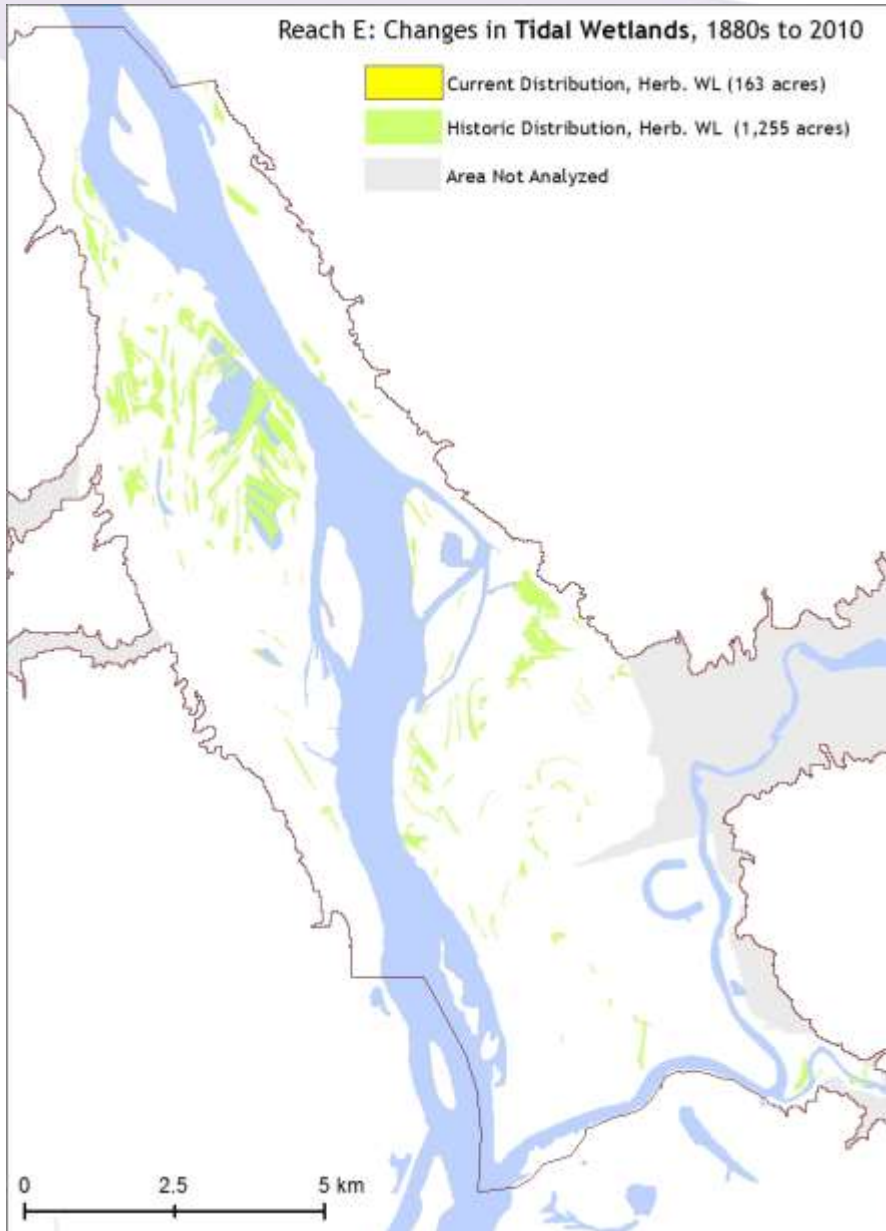
Reach C: Historic vs. Current



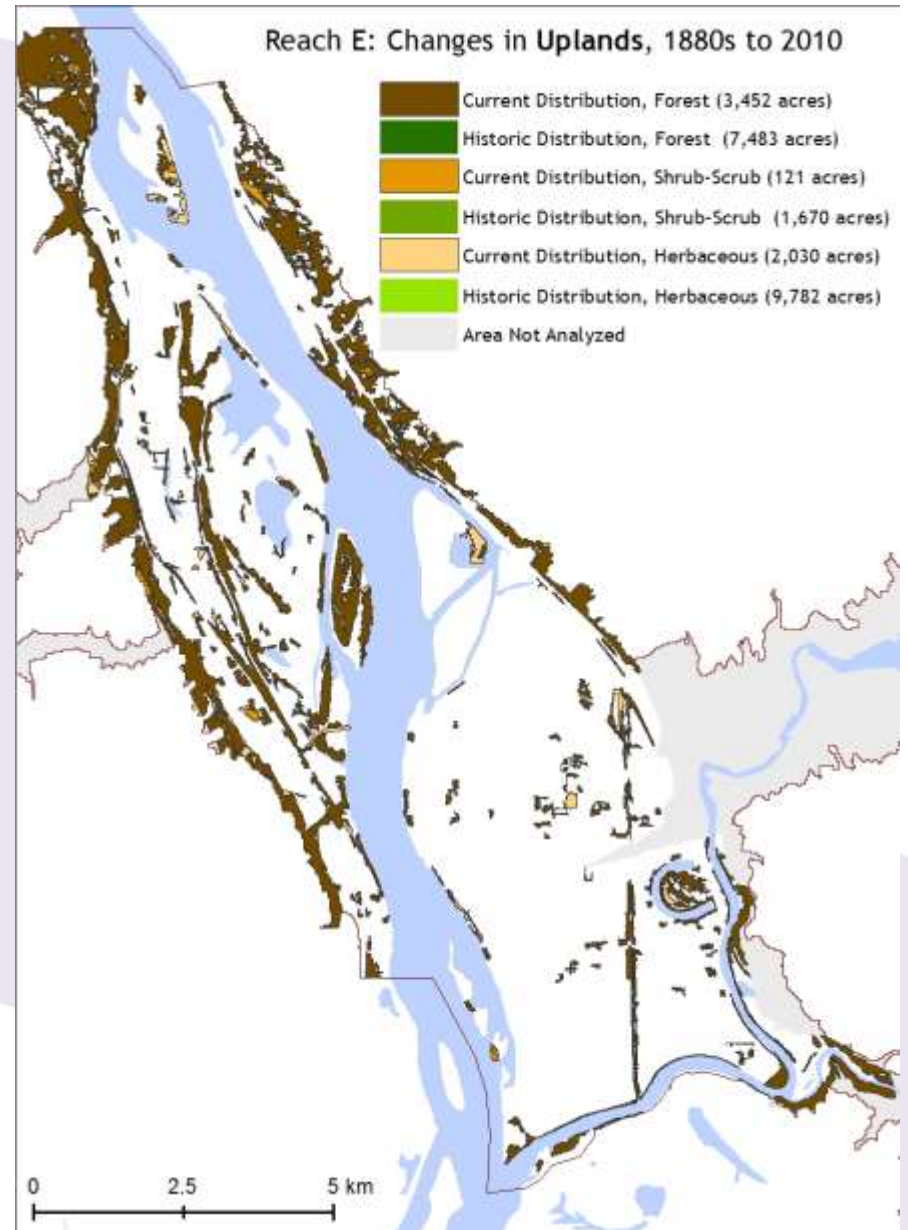
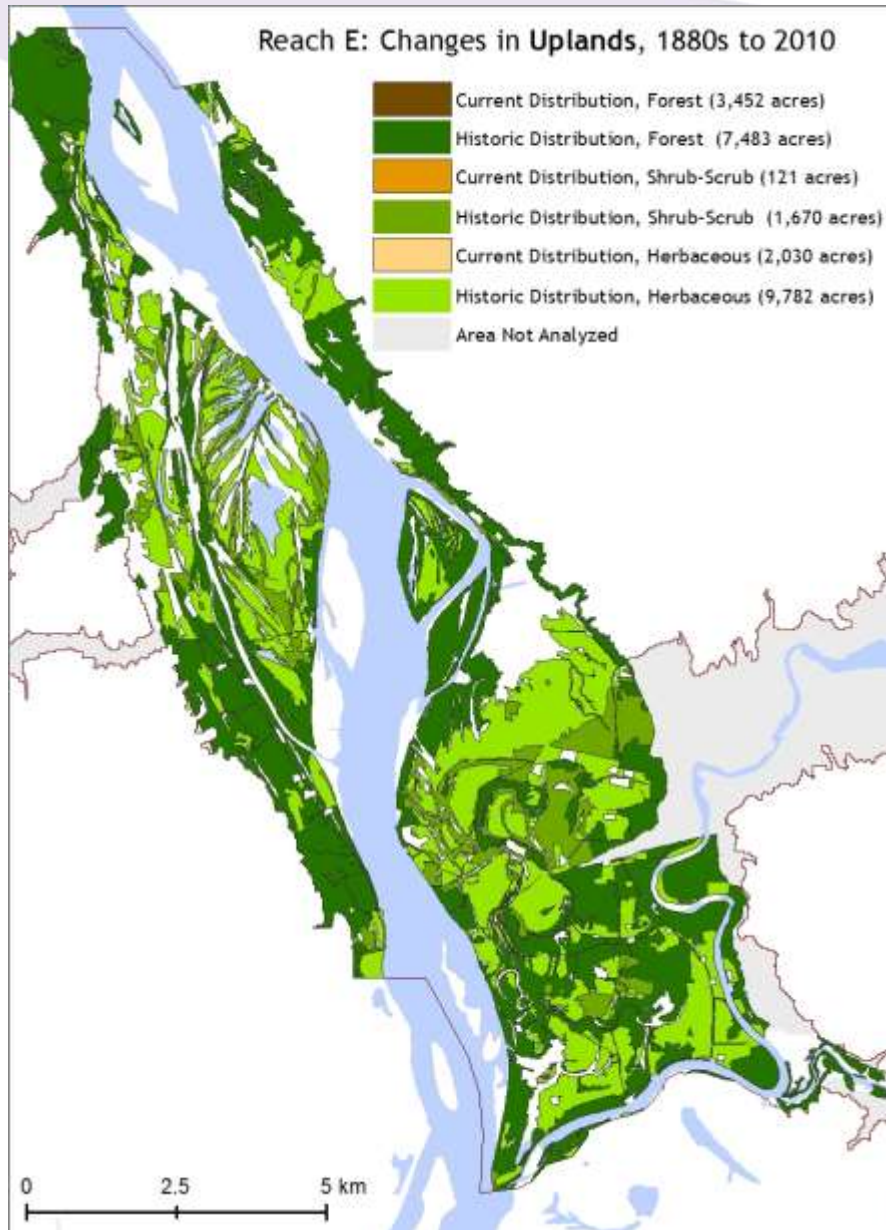
Reach C: Historic vs. Current



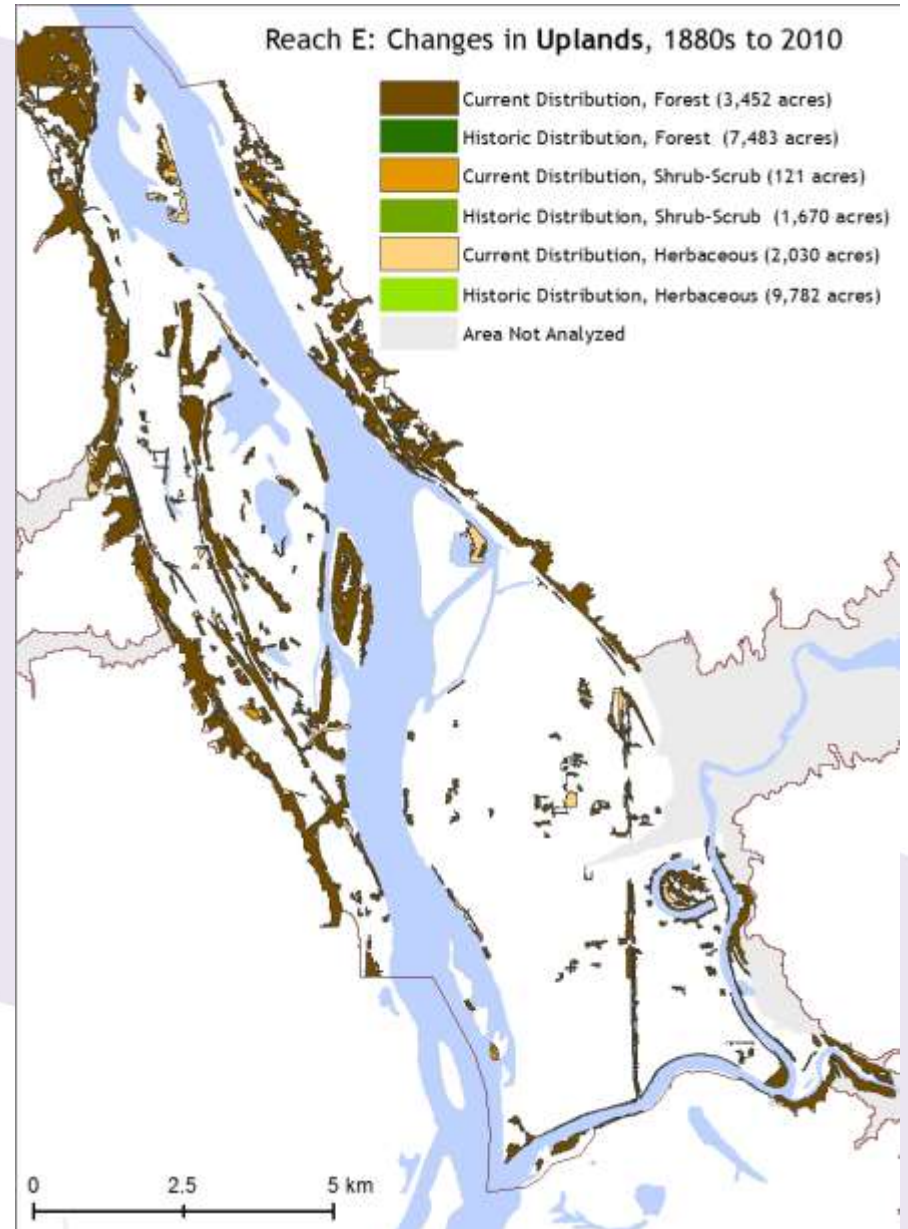
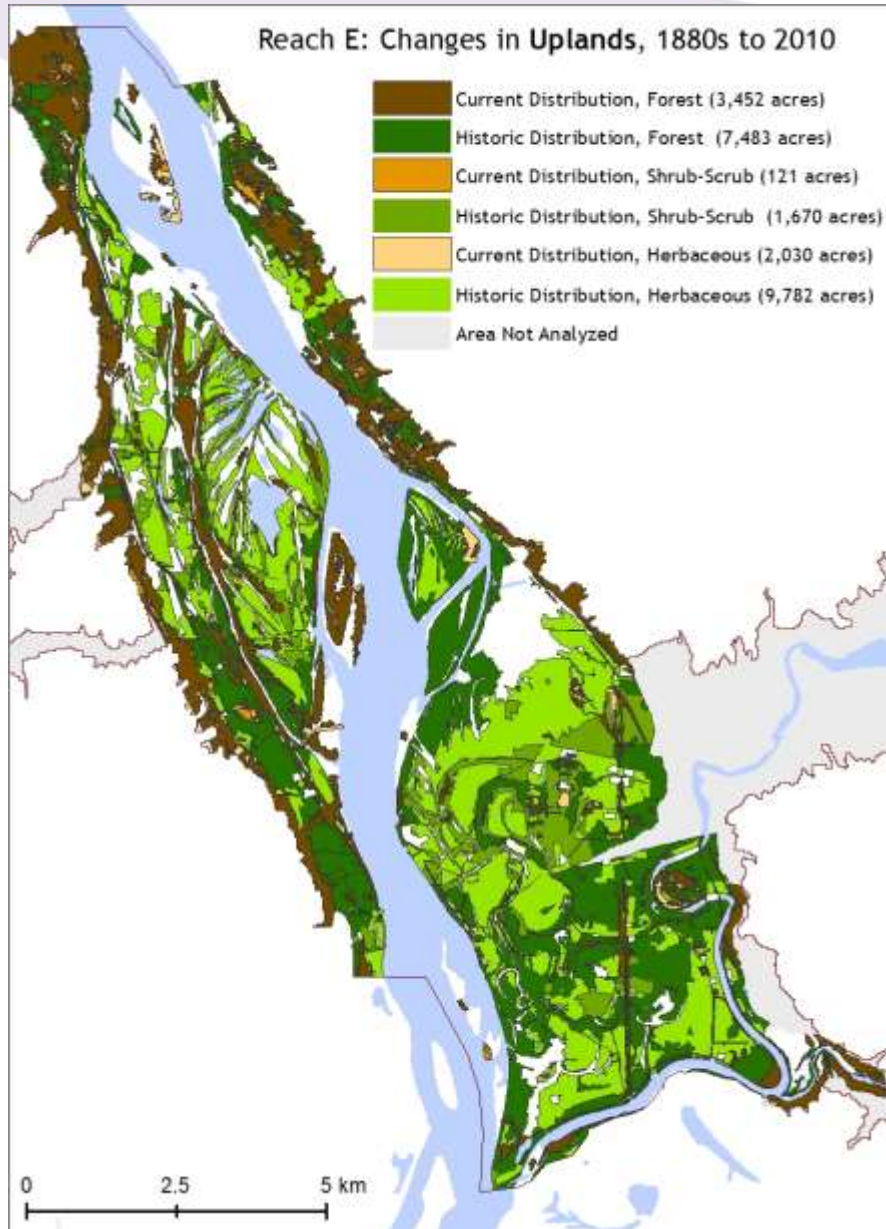
Reach E: Historic vs. Current



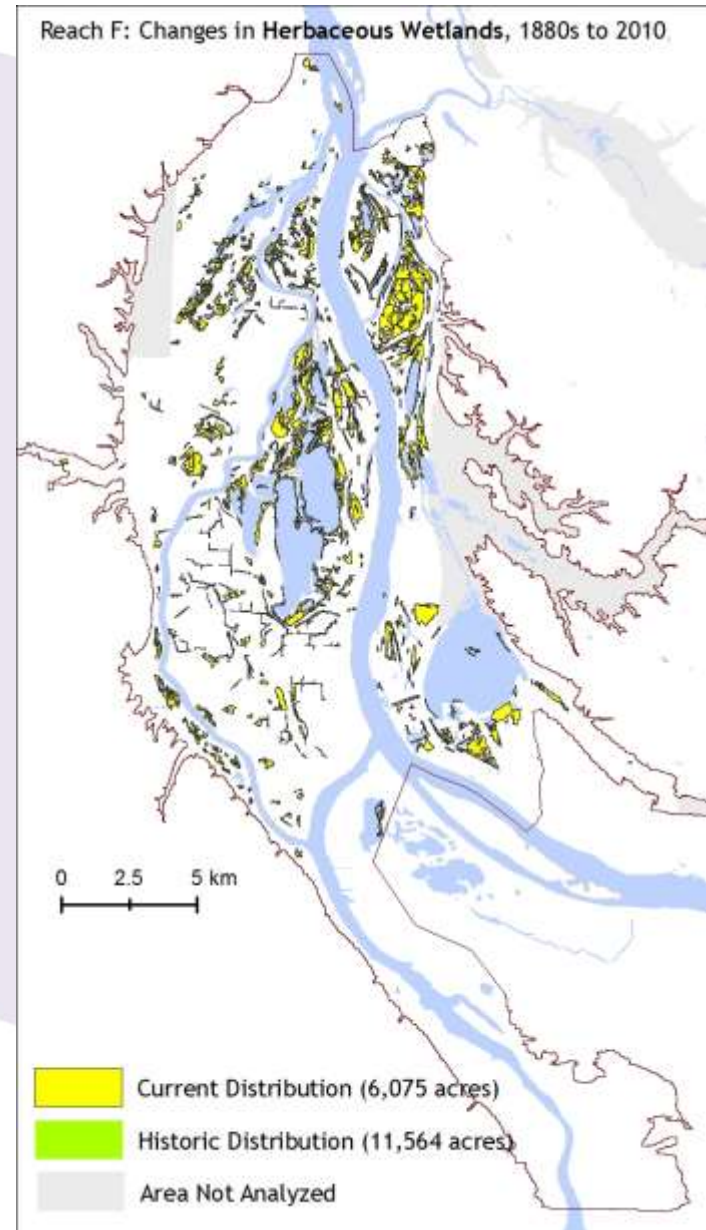
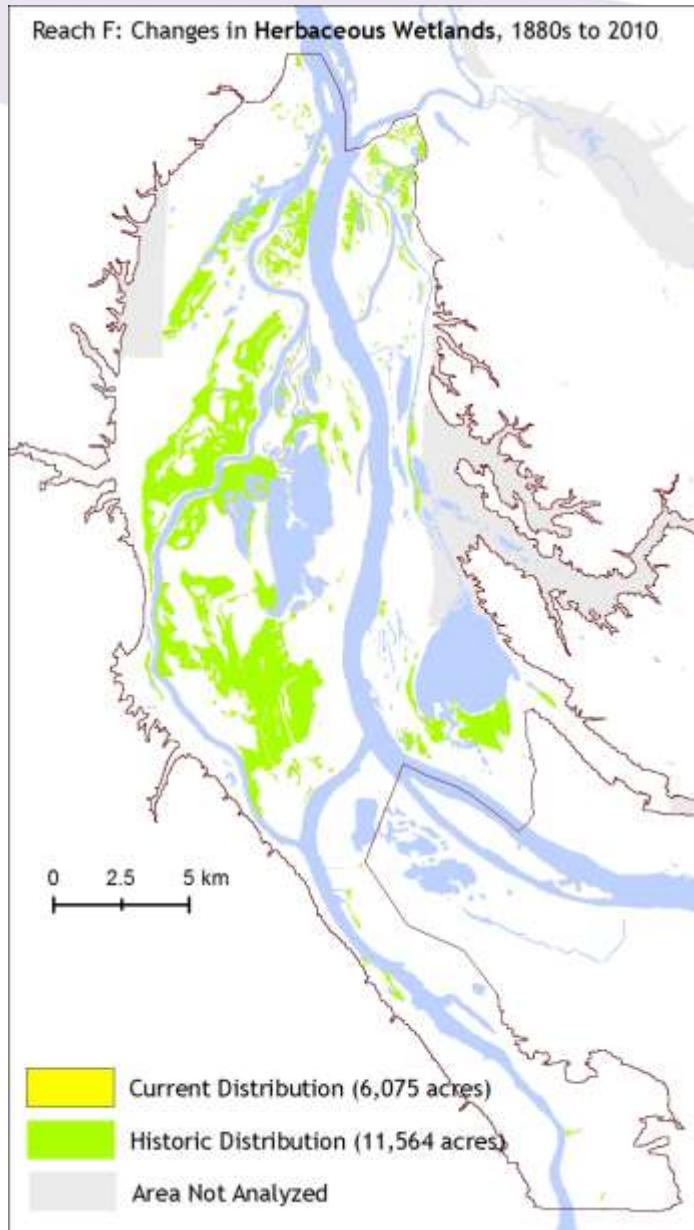
Reach E: Historic vs. Current



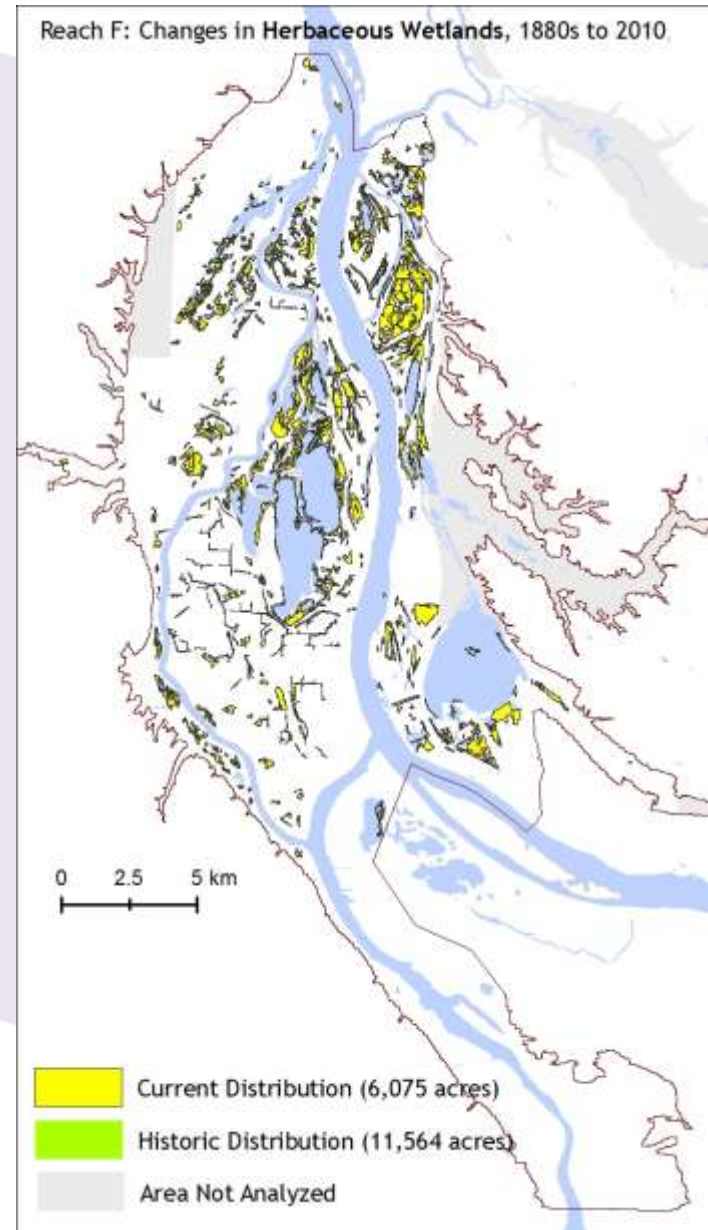
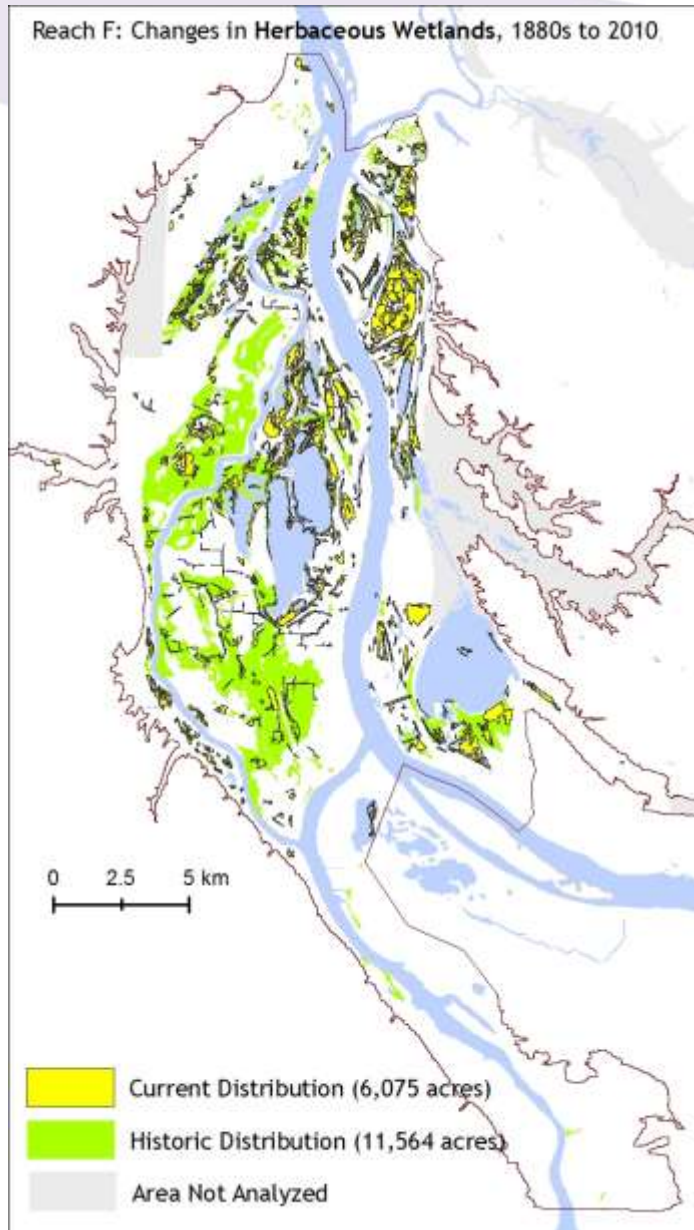
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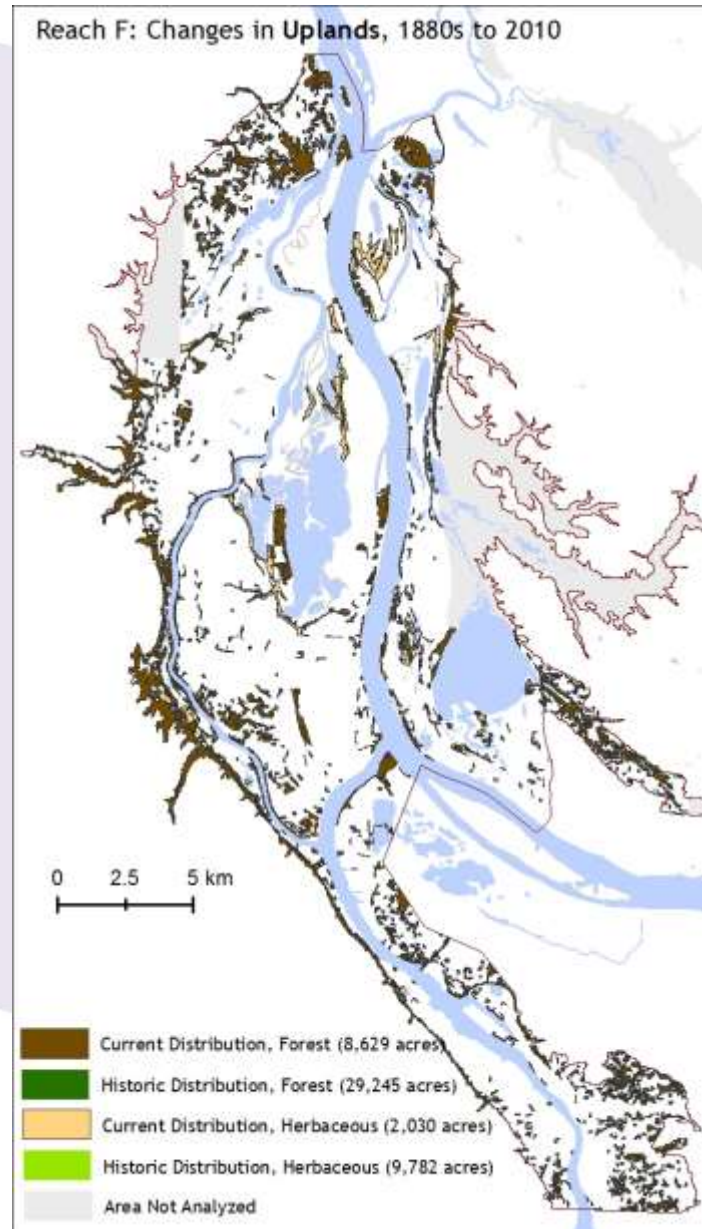
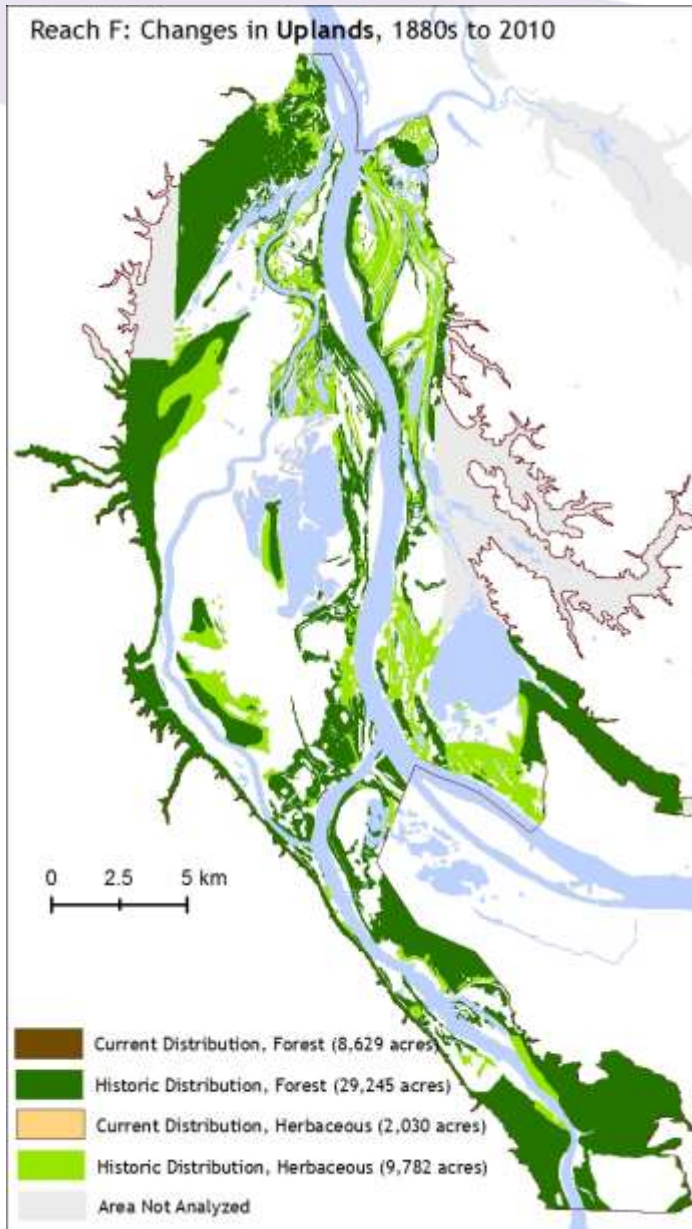
Reach F: Historic vs. Current



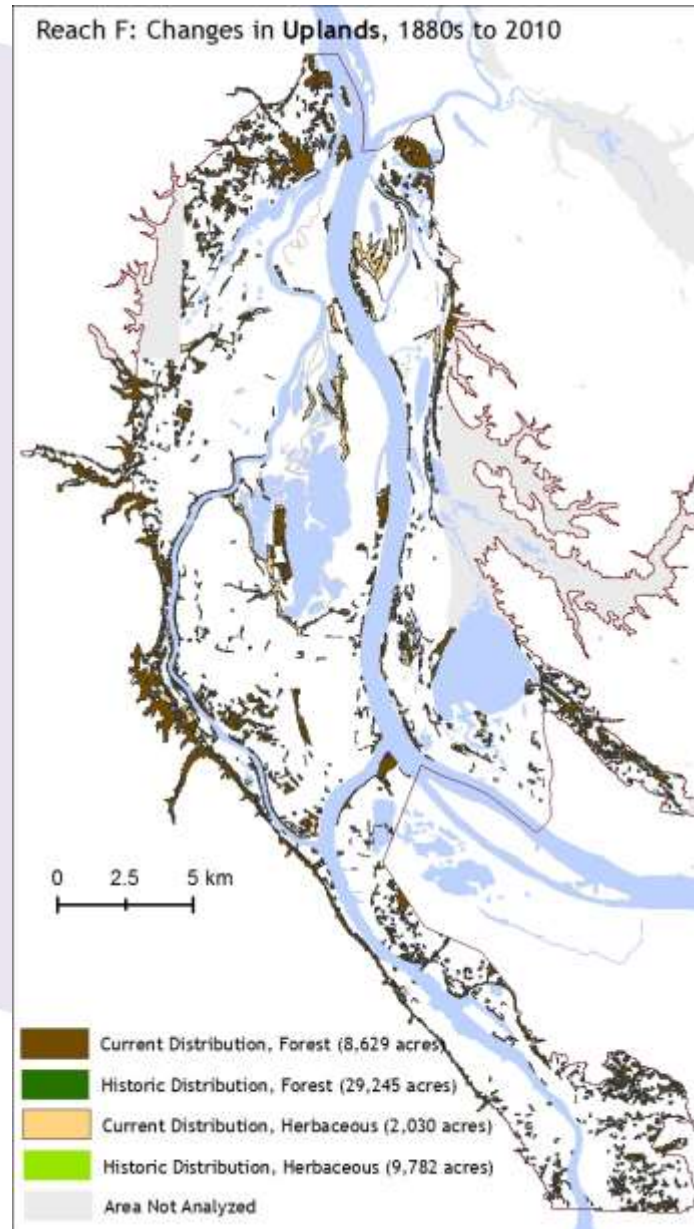
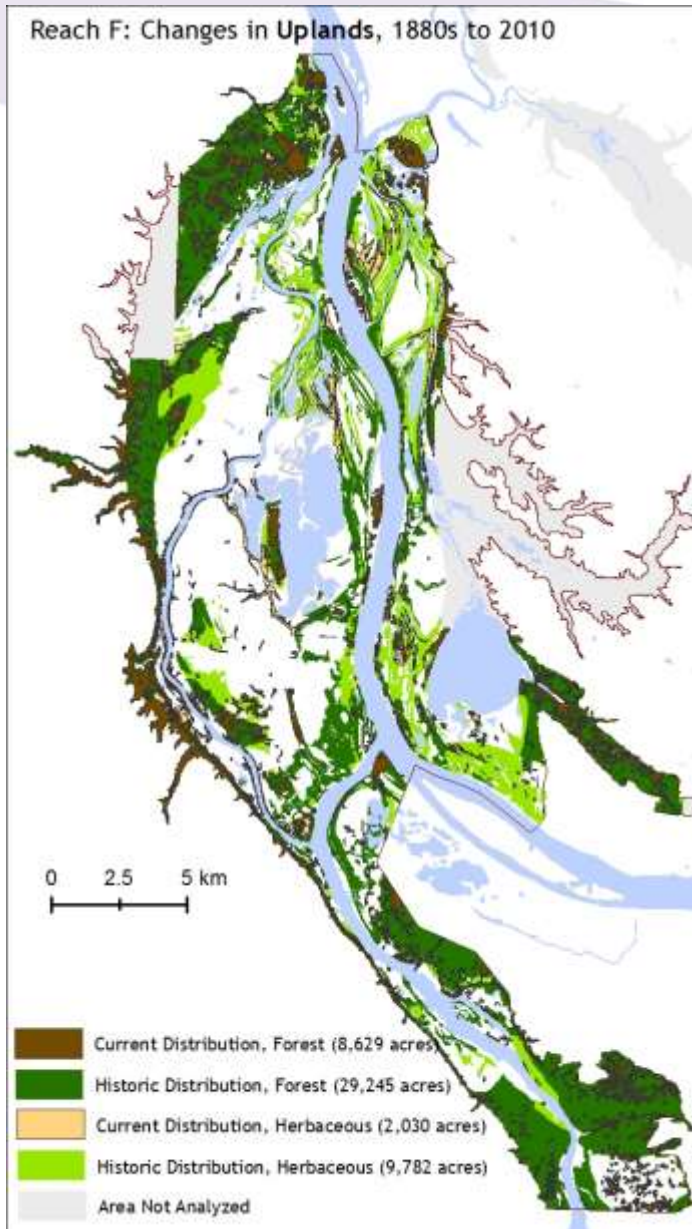
Reach F: Historic vs. Current



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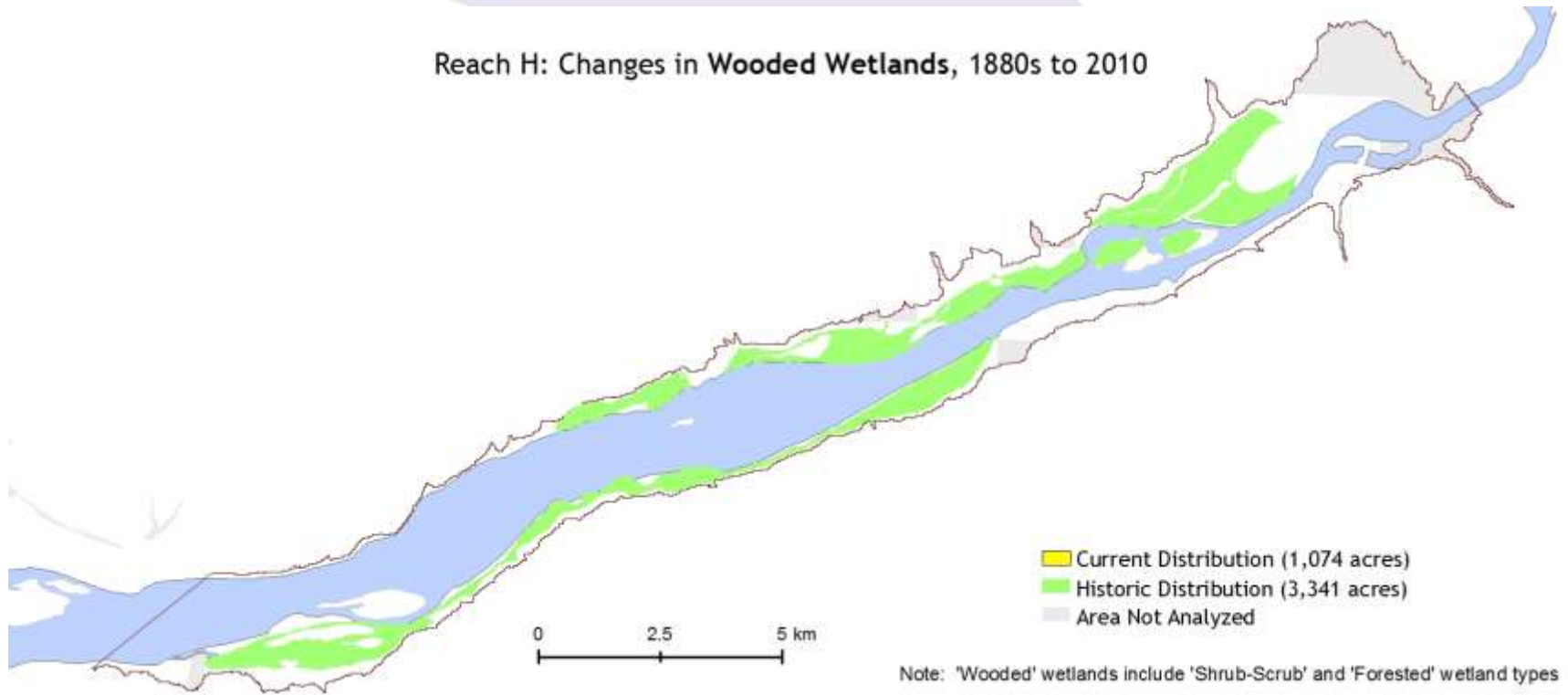


Reach F: Historic vs. Current

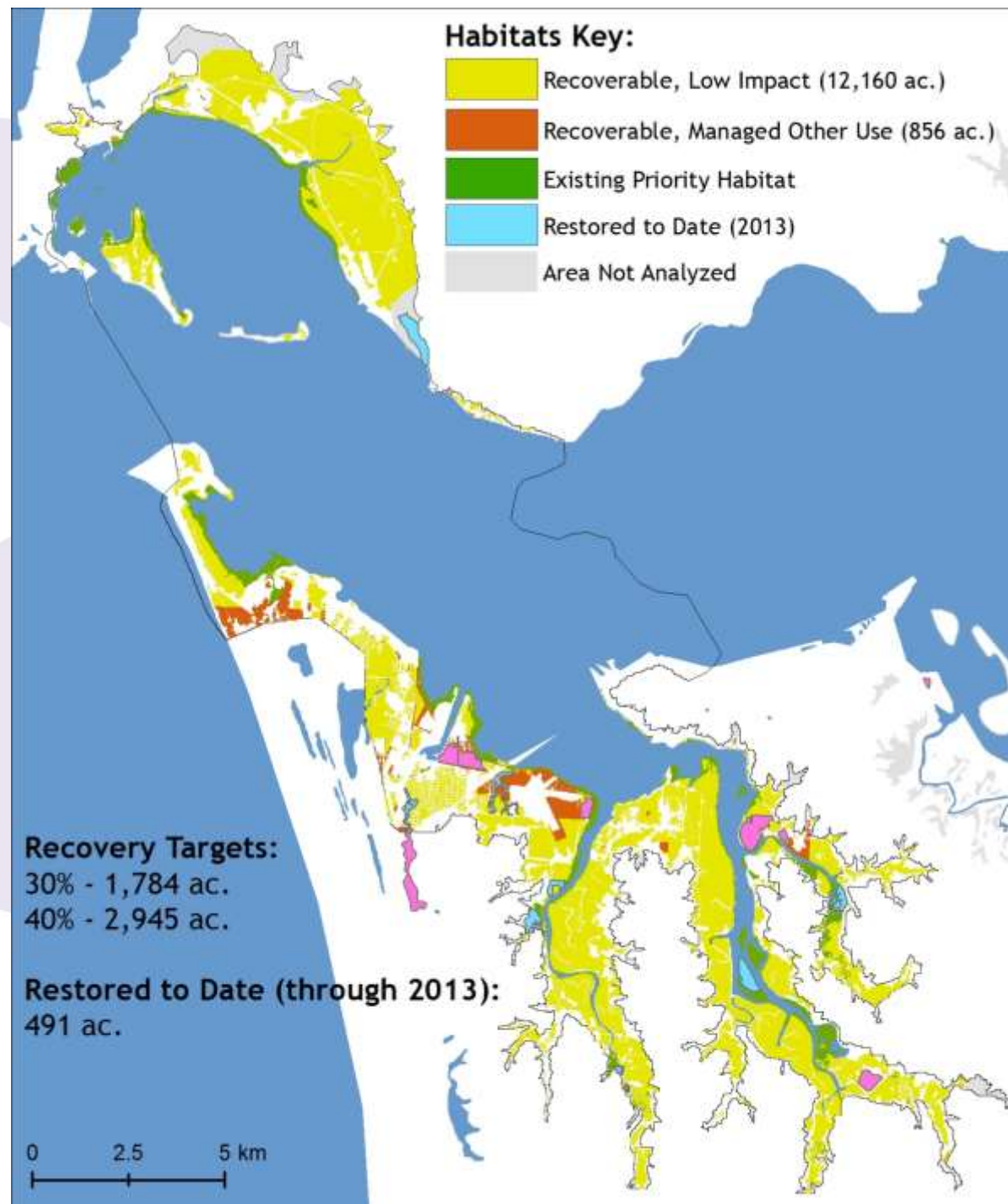


Reach H: Historic vs. Current

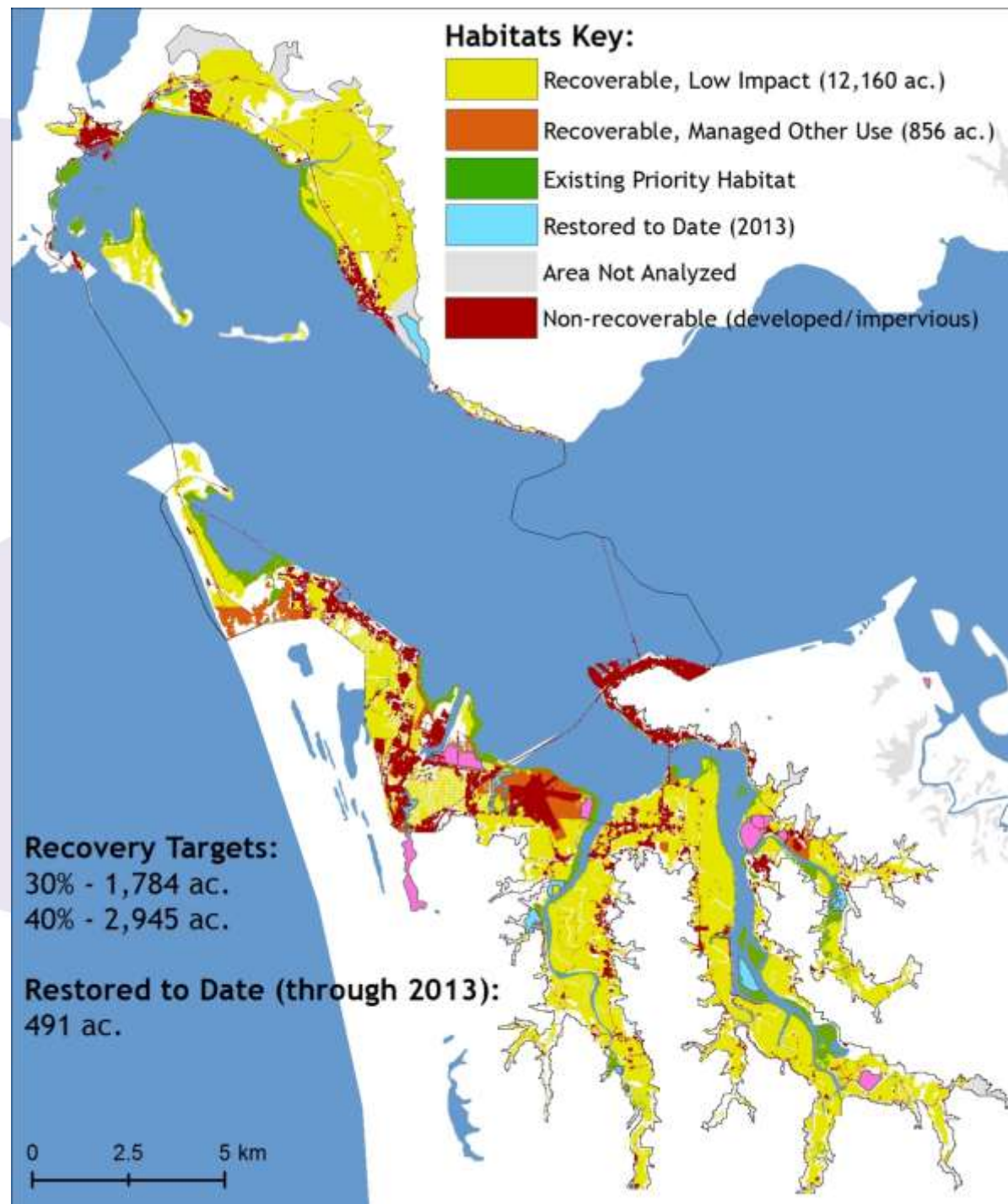
Reach H: Changes in Wooded Wetlands, 1880s to 2010



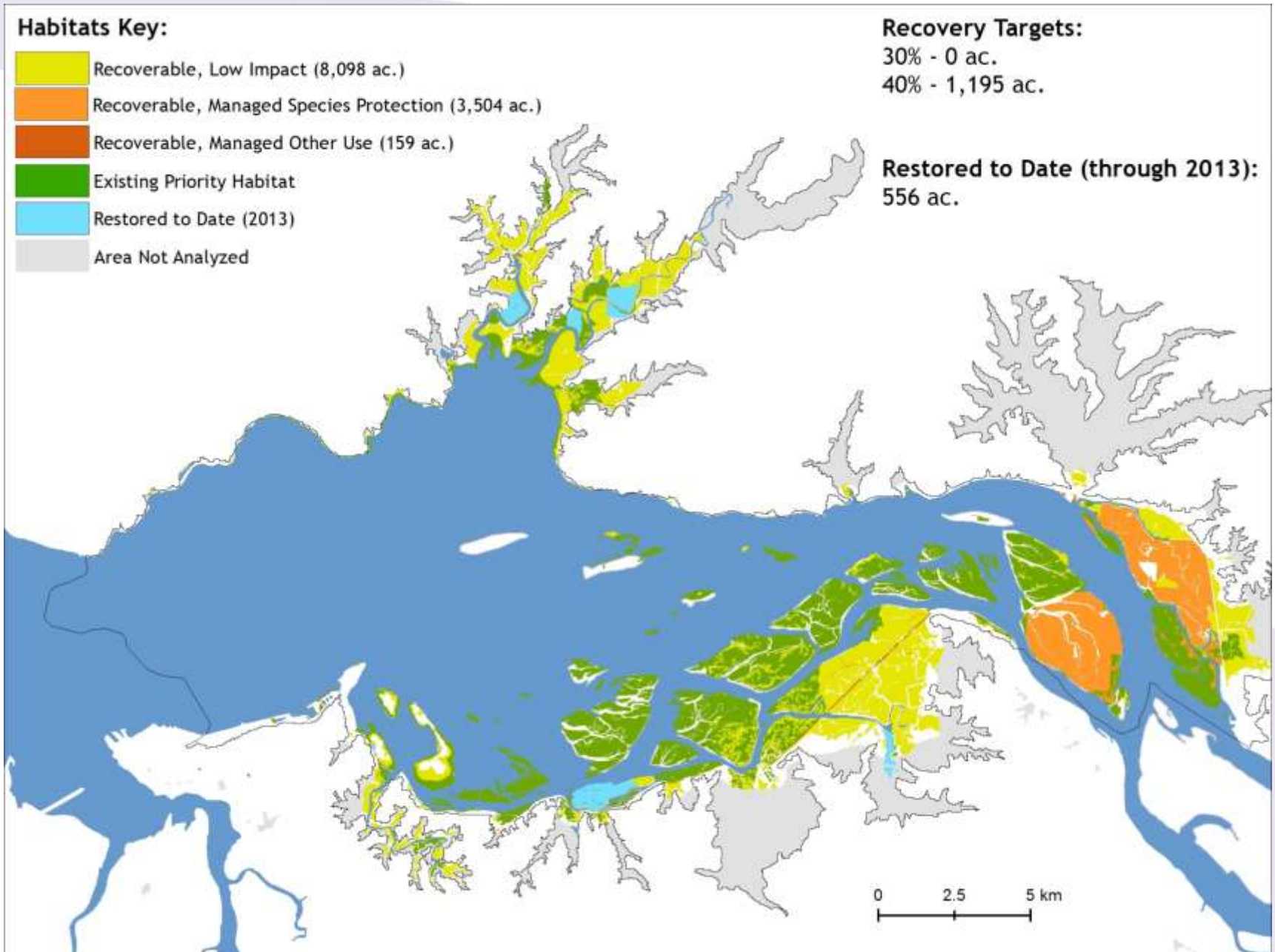
Reach A: Recoverable Habitats Extent and Accessibility



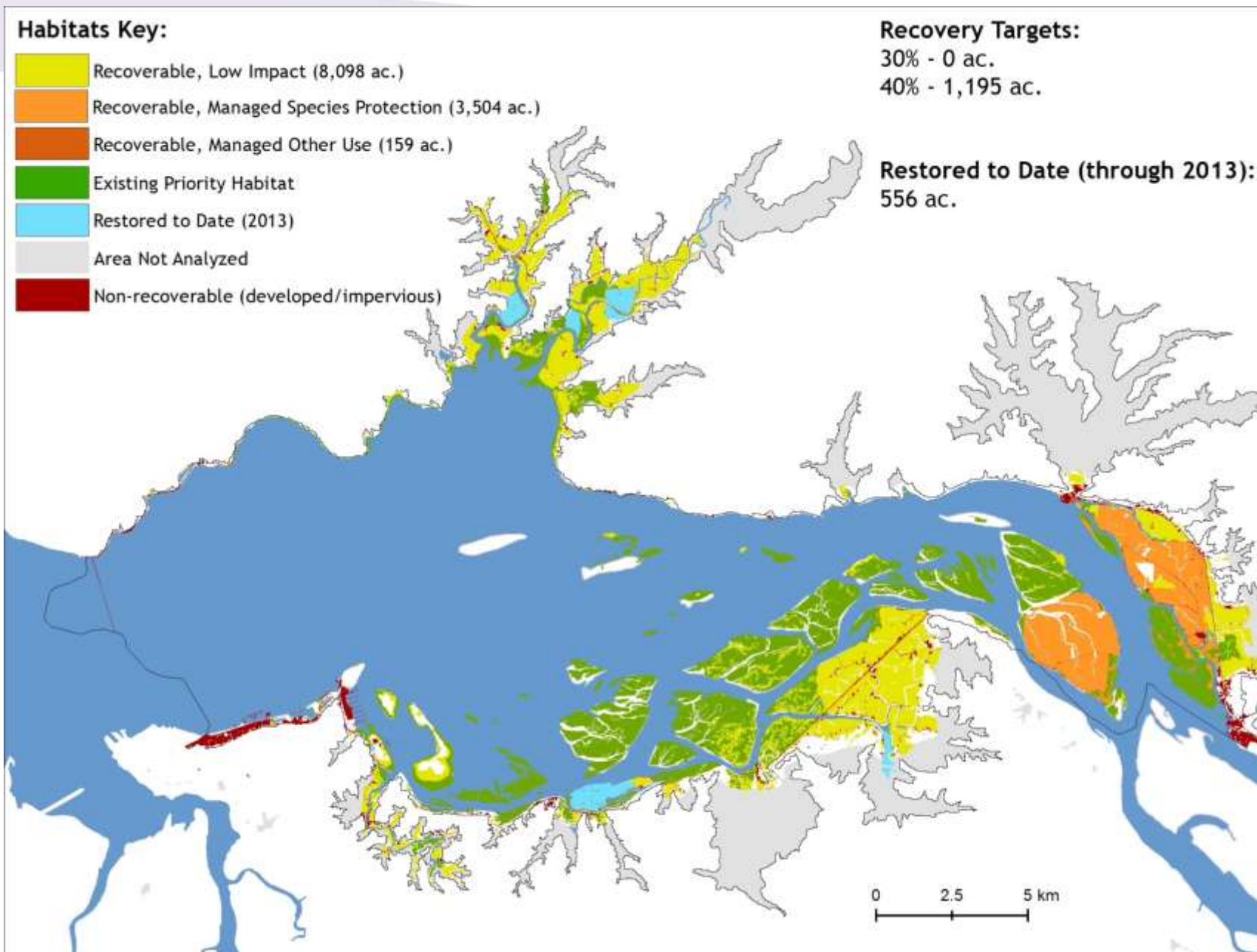
Reach A: Recoverable Habitats Extent and Accessibility



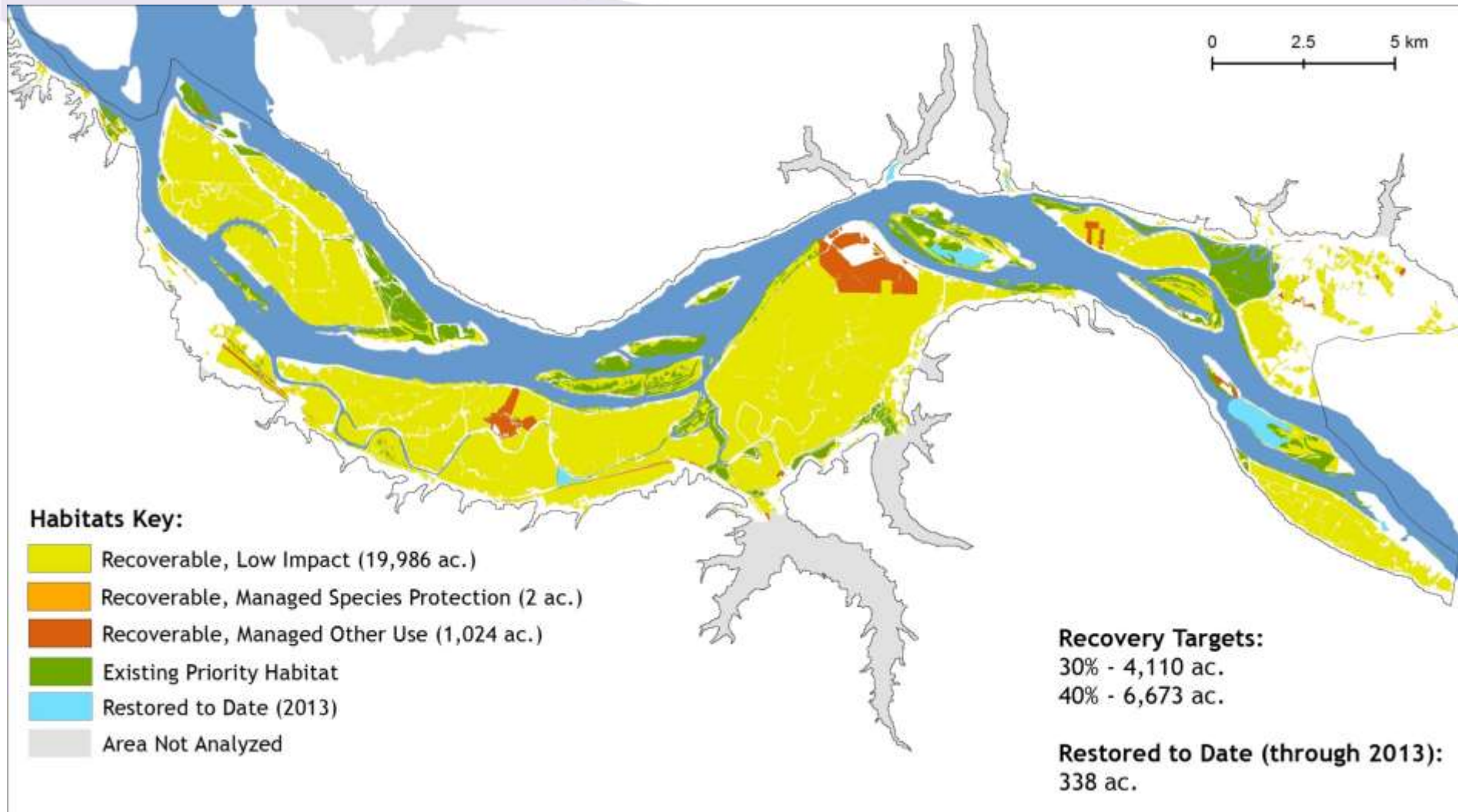
Reach B: Recoverable Habitats Extent and Accessibility



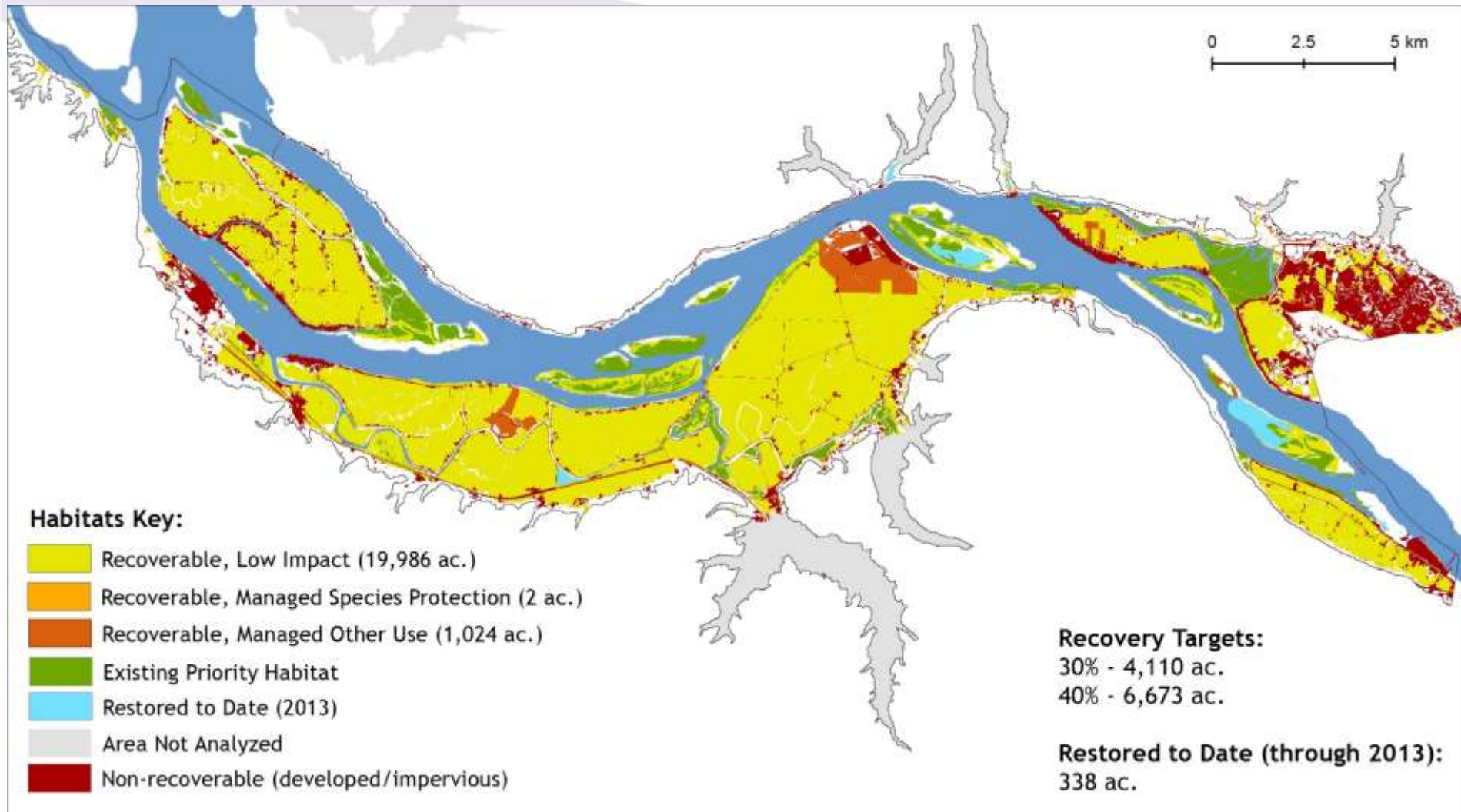
Reach B: Recoverable Habitats Extent and Accessibility



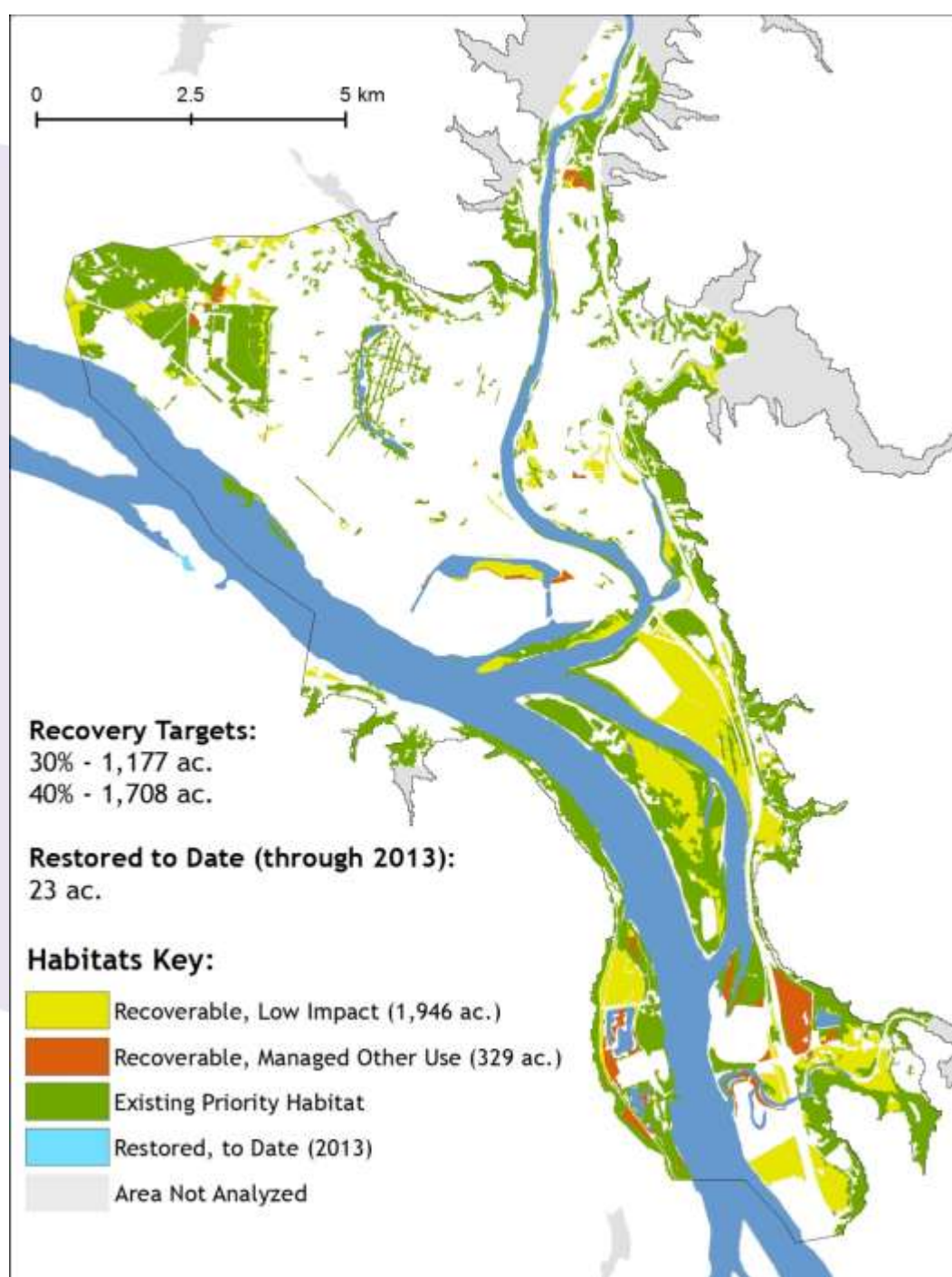
Reach C: Recoverable Habitats Extent and Accessibility



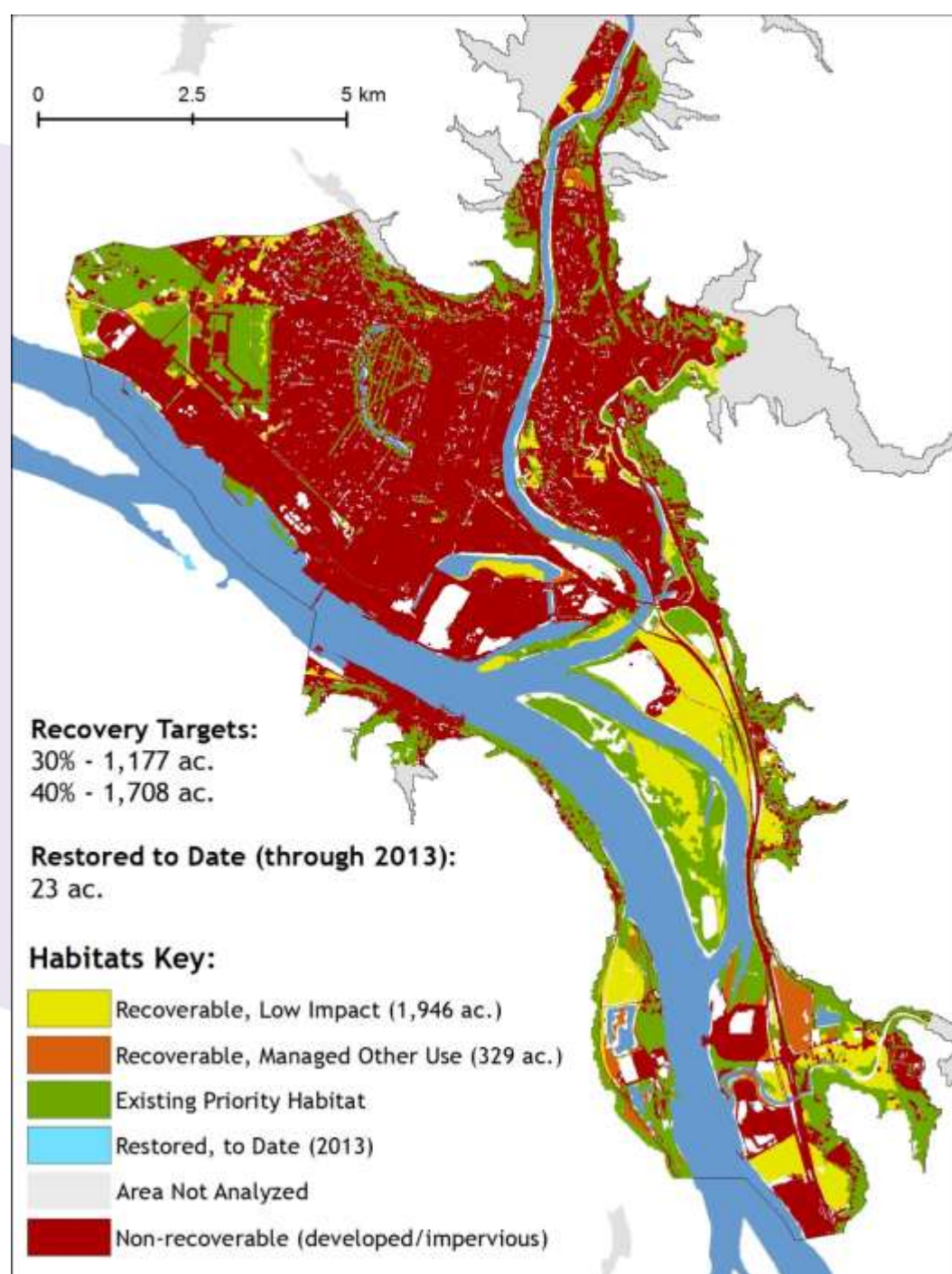
Reach C: Recoverable Habitats Extent and Accessibility



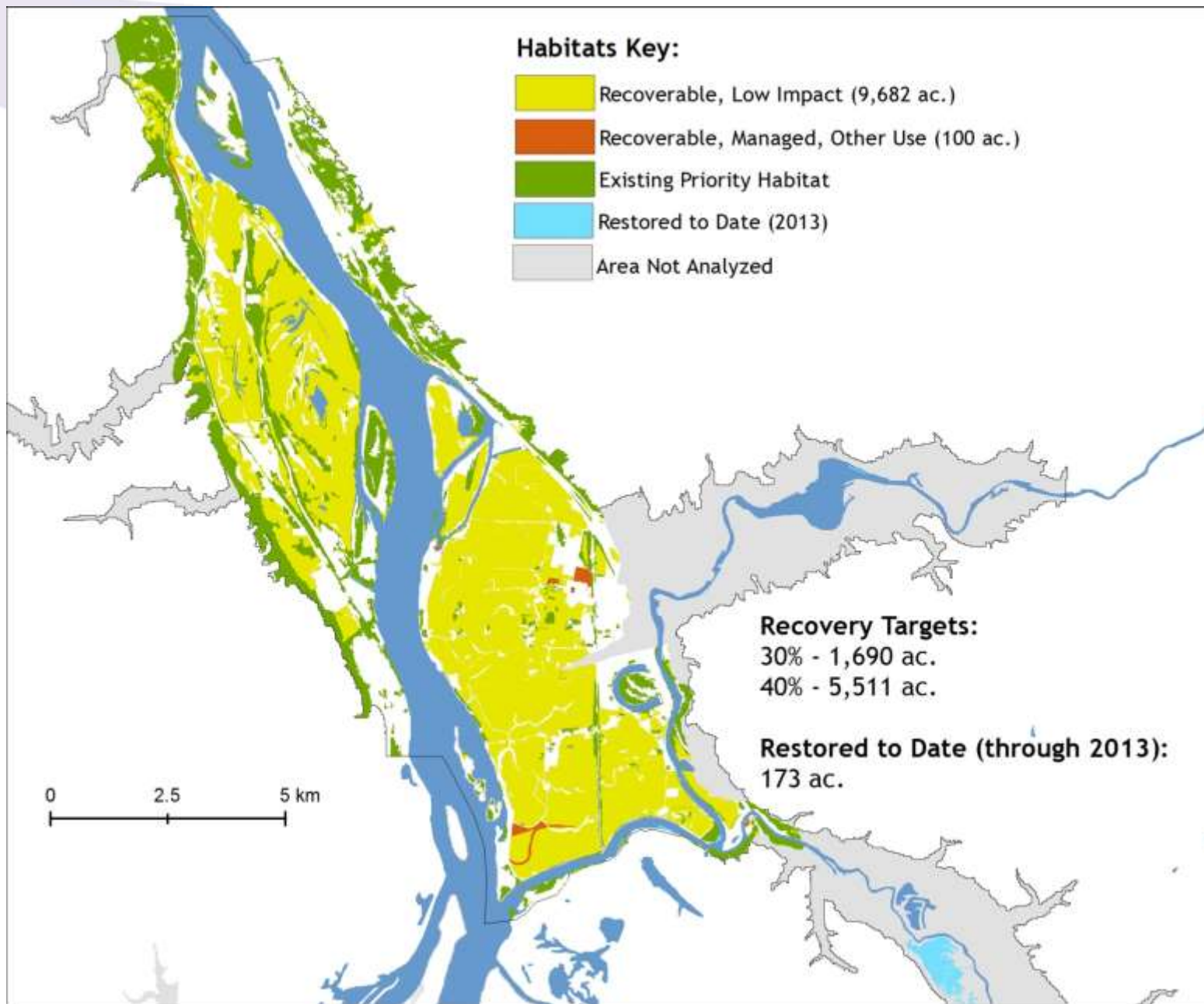
Reach D: Recoverable Habitats Extent and Accessibility



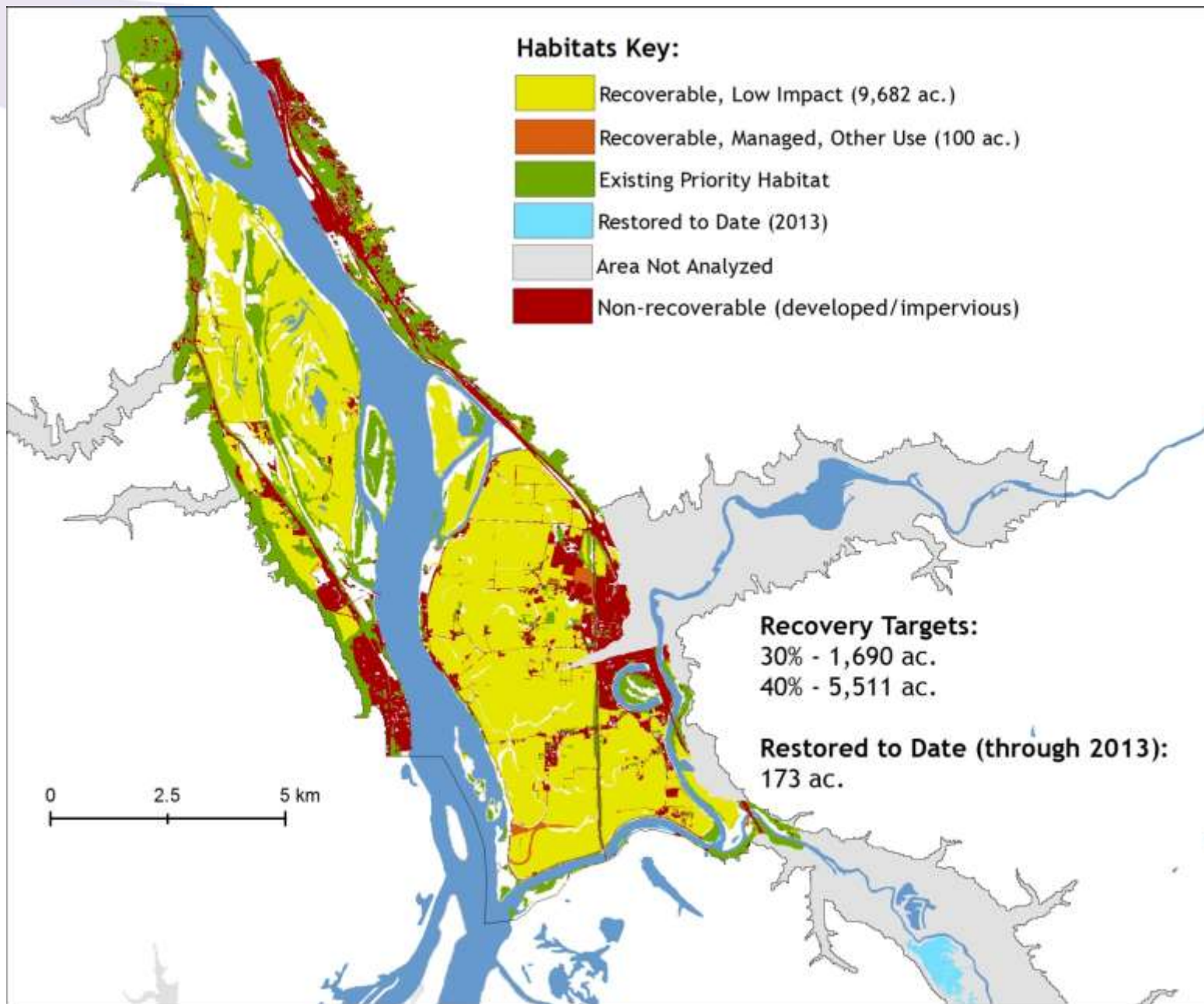
Reach D: Recoverable Habitats Extent and Accessibility



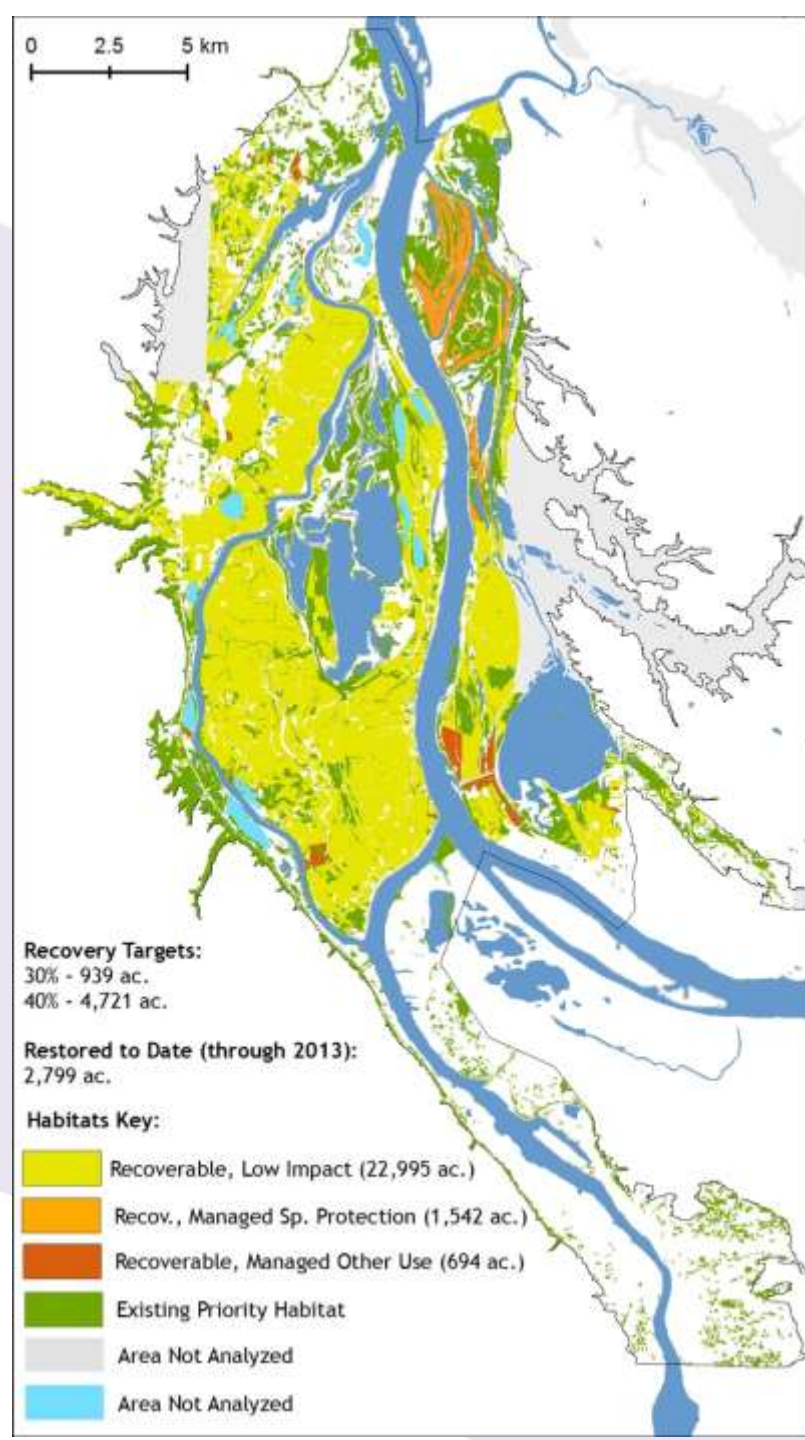
Reach E: Recoverable Habitats Extent and Accessibility



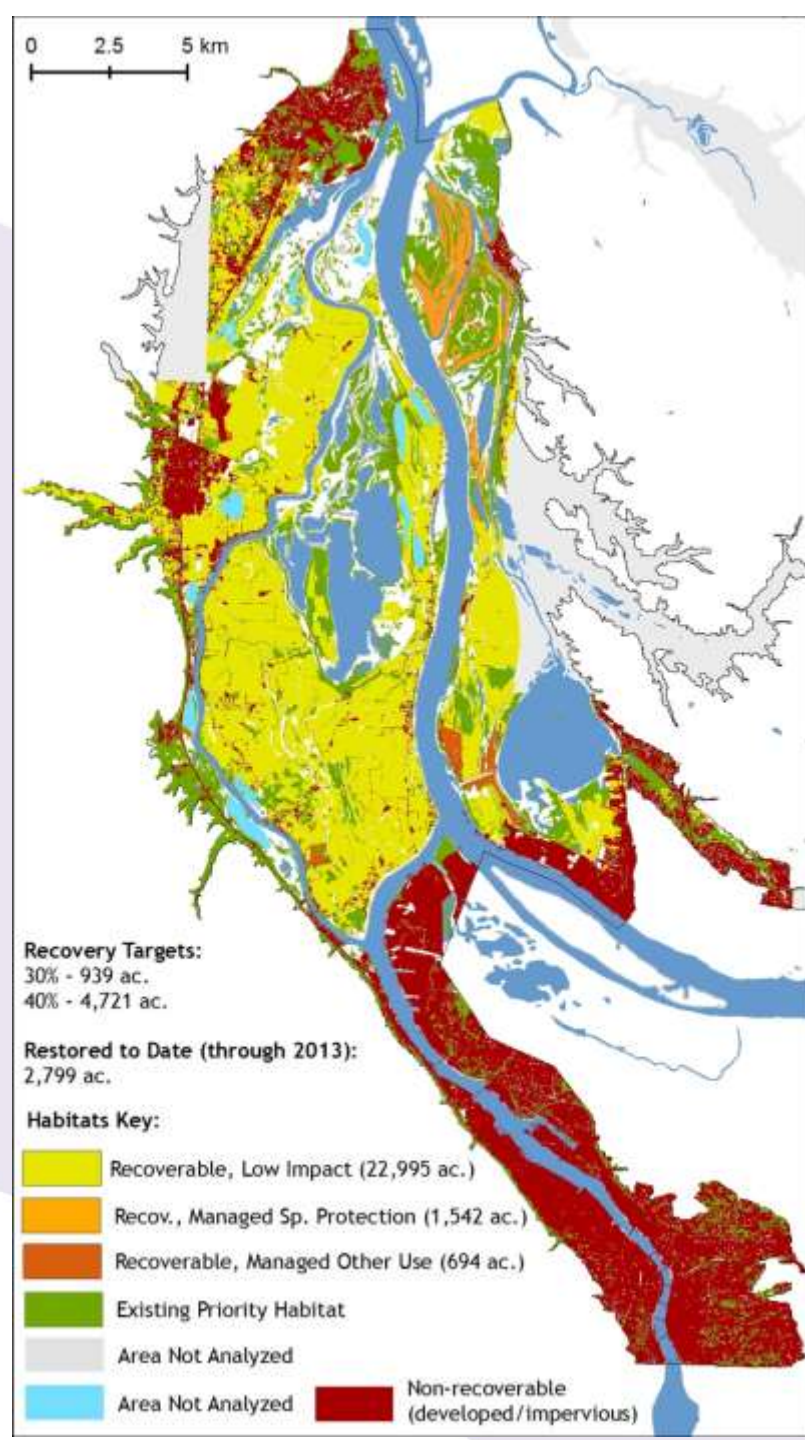
Reach E: Recoverable Habitats Extent and Accessibility



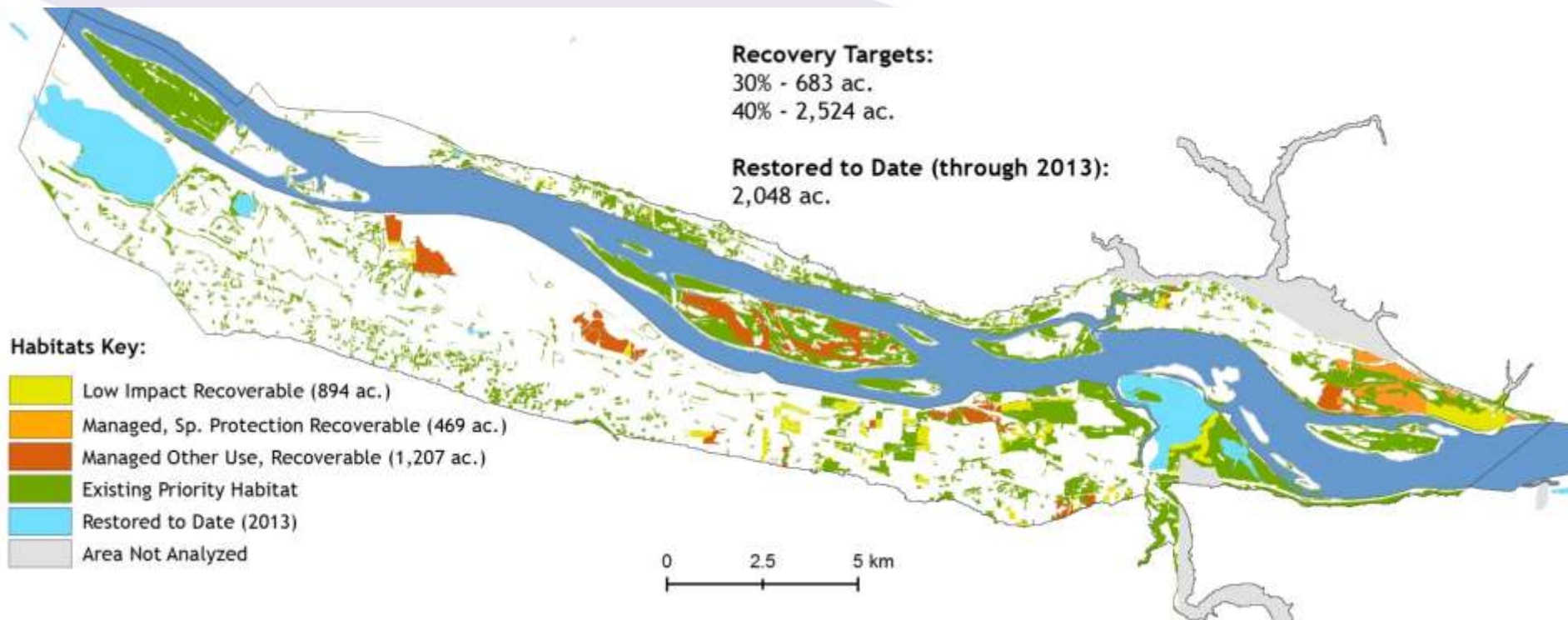
Reach F: Recoverable Habitats



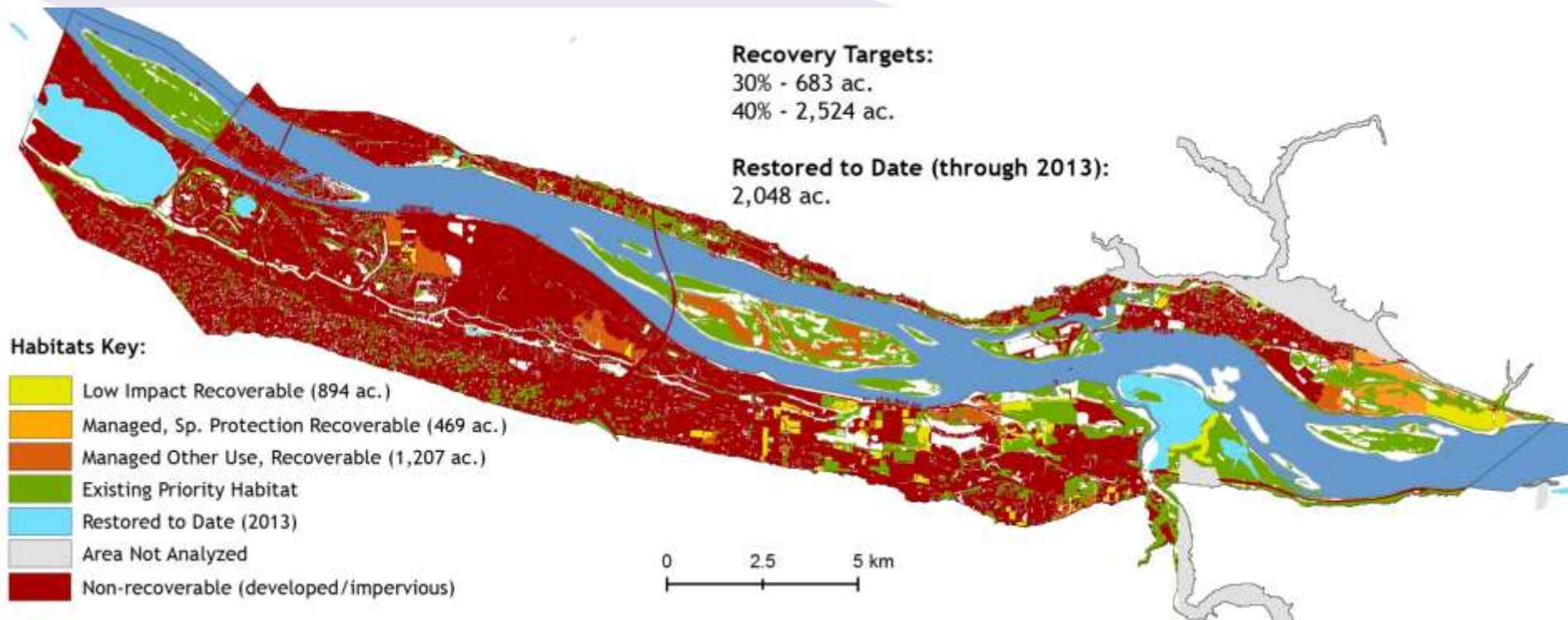
Reach F: Recoverable Habitats



Reach G: Recoverable Habitats Extent and Accessibility

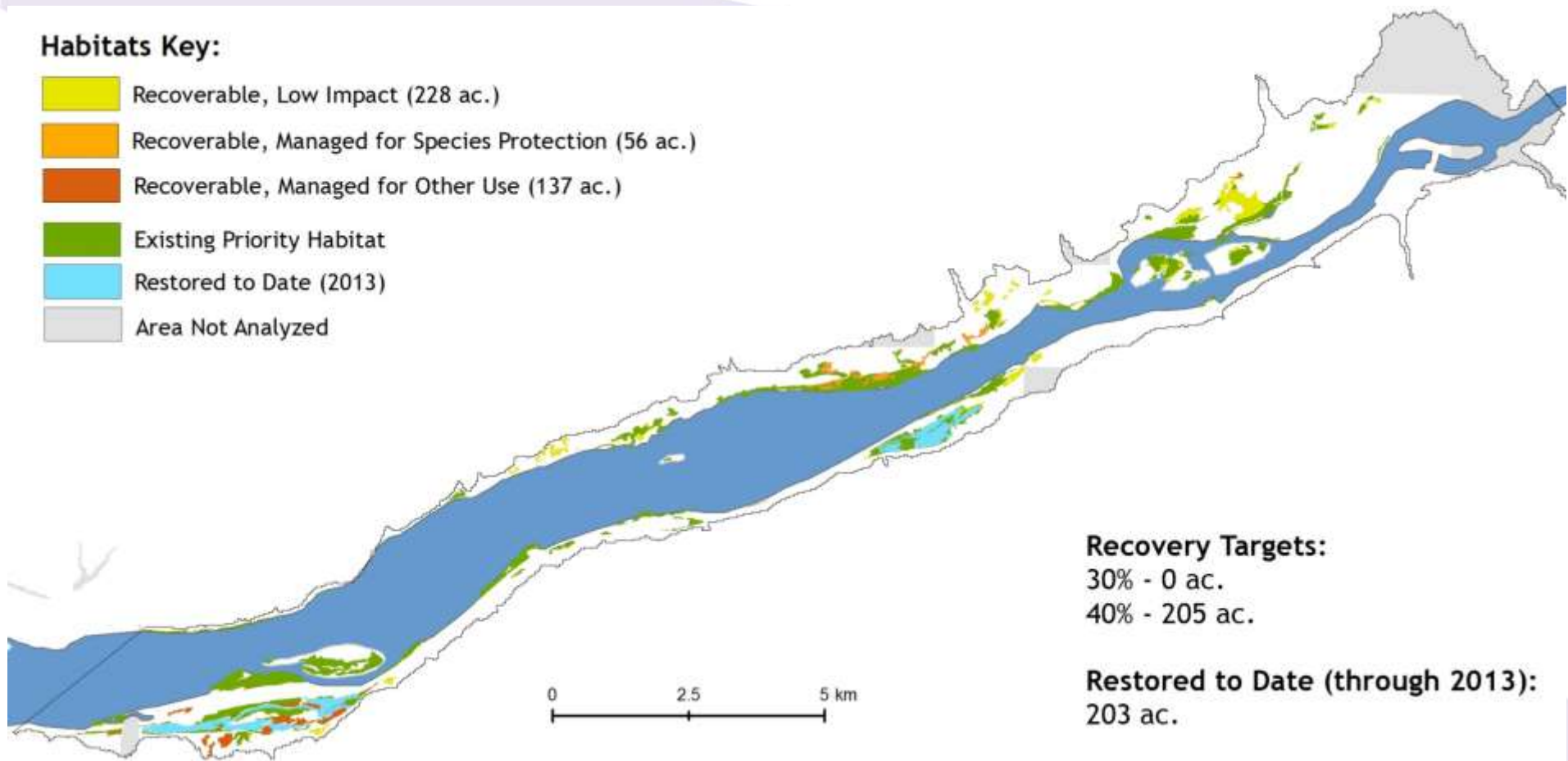
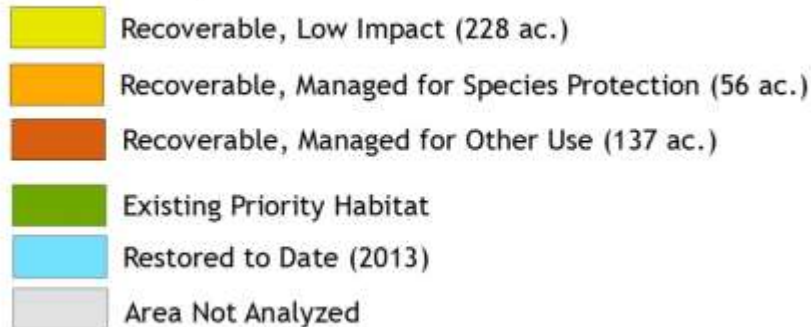


Reach G: Recoverable Habitats Extent and Accessibility



Reach H: Recoverable Habitats Extent and Accessibility

Habitats Key:



Recovery Targets:

30% - 0 ac.

40% - 205 ac.

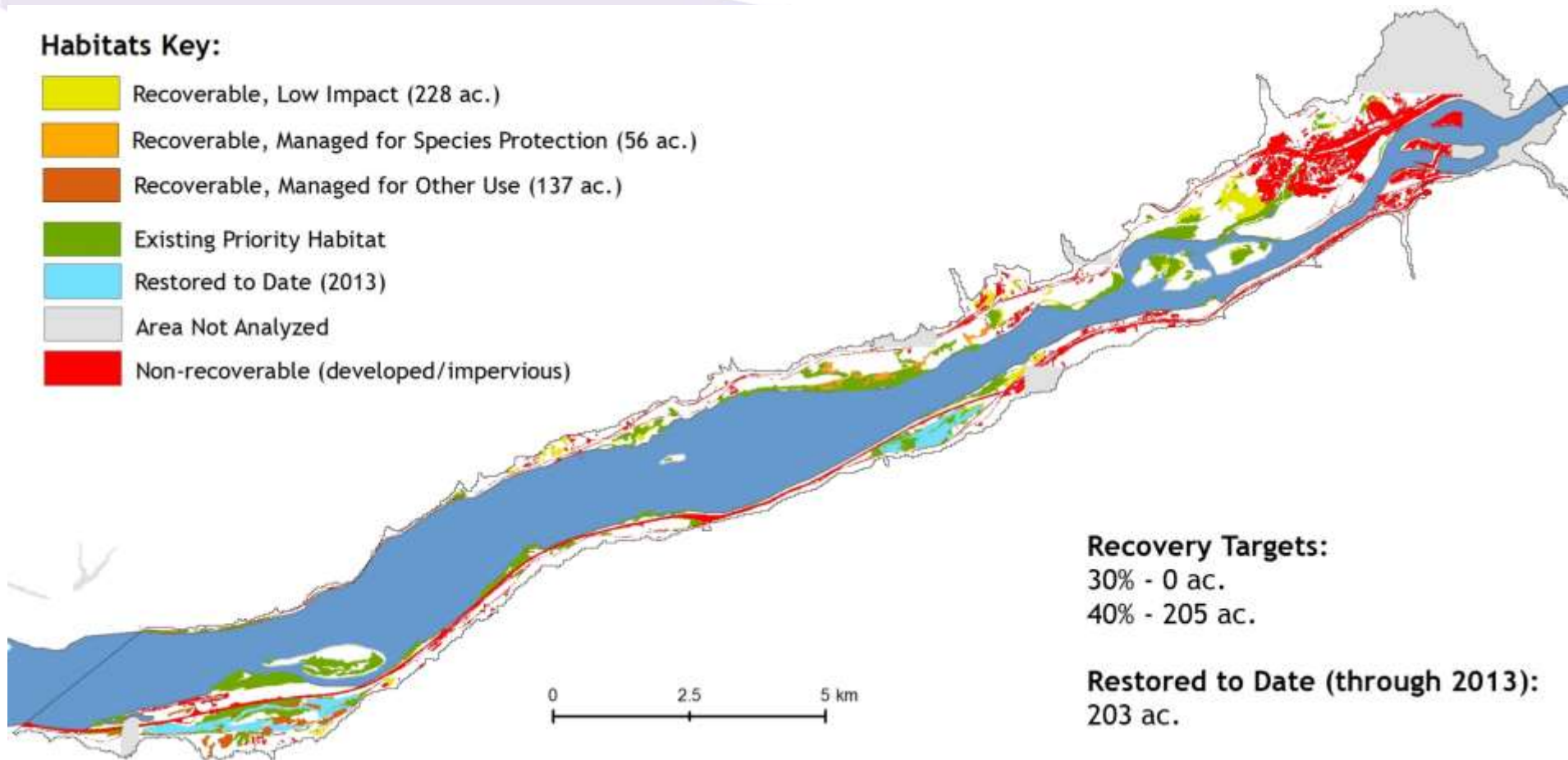
Restored to Date (through 2013):

203 ac.

Reach H: Recoverable Habitats Extent and Accessibility

Habitats Key:

-  Recoverable, Low Impact (228 ac.)
-  Recoverable, Managed for Species Protection (56 ac.)
-  Recoverable, Managed for Other Use (137 ac.)
-  Existing Priority Habitat
-  Restored to Date (2013)
-  Area Not Analyzed
-  Non-recoverable (developed/impervious)



Recovery Targets:

30% - 0 ac.

40% - 205 ac.

Restored to Date (through 2013):

203 ac.