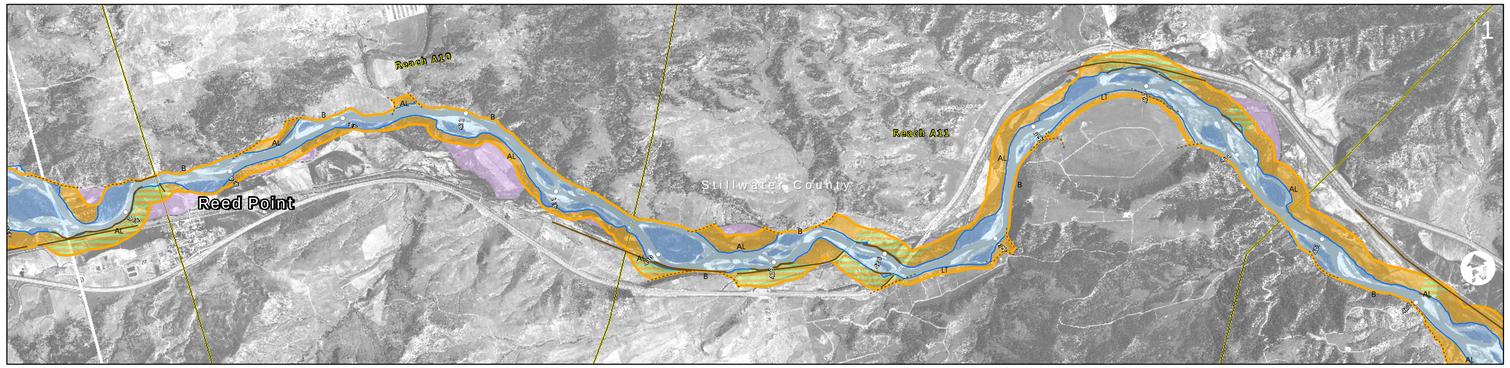
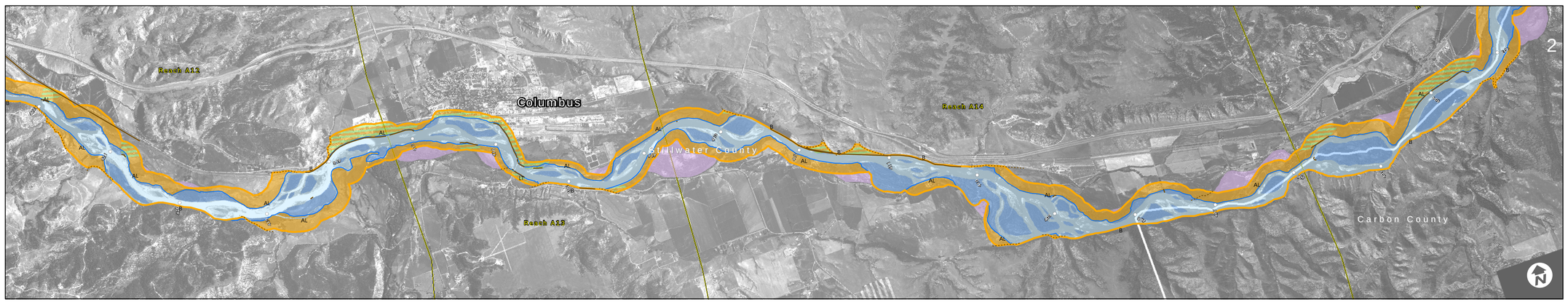
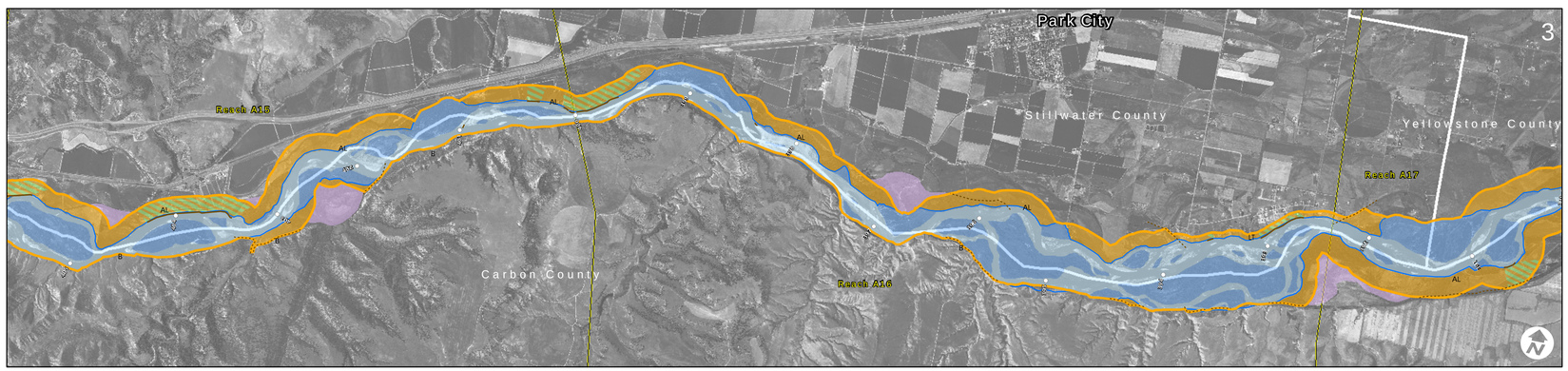
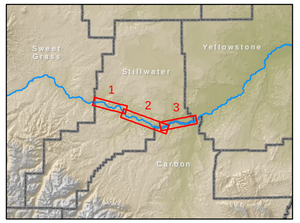








2001 Channel

Historic Migration Zone (1950-2001)
area of mapped channel occupation based on 1950, 1976,1995 and 2001 air photos (see Fig. 2)

Erosion Buffer *-100-yr erosion buffer based on reach-scale mean migration rate; extended from 2001 banklines*

- AL Alluvium: recent river deposits (see Fig. 1)
- LT Low Terrace: 10-20 ft high *-see Fig. 1*
- HT High Terrace: 20-40 ft high *-see Fig. 1*
- B Bedrock (undifferentiated) *-no buffer applied (see Fig. 1)*

Avulsion Potential Zone *-area with relic channel remnants prone to reactivation*

Restricted Migration Area
area of CMZ or avulsion zones isolated by bank and floodplain protection features

Composite CMZ
area encompassing 1950-2001 channel, and erosion buffer

Reaches

Counties

Bank Protection, Dikes and Transportation Encroachments

Geologic Breaks *-mapped contact between geologic units (see Fig. 1)*

Figure 1: Schematic Cross Section

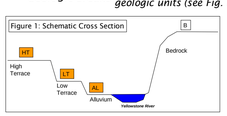
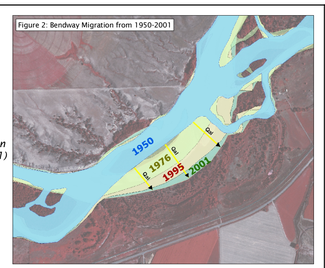


Figure 2: Bendway Migration from 1950-2001



Yellowstone River Channel Migration Zone

Stillwater County and Carbon County, Montana

1:36,000

0 0.5 1 2 Miles

0 0.5 1 2 Kilometers

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Development and Purpose of A Channel Migration Zone

The boundaries on this map are intended to provide a basic screening tool to help guide management decisions on the Yellowstone River and ARE NOT intended to provide regulatory boundaries or override site-specific assessments. This map identifies a 100-year migration corridor for the Yellowstone River based on measured migration rates between 1950 and 2001. It includes the 2001 channel, historic channel locations since 1950, and an erosion buffer based on measured rates of lateral movement. Also identified are areas with relic channels prone to reactuation (Avulsion Potential Zone).

This map was revised in early 2009 to incorporate high resolution topographic data. For more information on CMZ map development, see companion report, "Yellowstone River Channel Migration Zone Mapping," prepared for Custer County Conservation District and Yellowstone River Conservation District Council, February 20, 2009.

For more information on the Yellowstone River Conservation District Council, see http://dnrc.mt.gov/cardd/yellowstoneriverconcil.

The corridor delineations presented on this map are intended to provide a basic screening tool to help guide and support management decisions within the Yellowstone River corridor. The expanse of the project area requires that the results are broad-scale in nature, and therefore less precise than highly detailed site-specific analyses. The results are unequivocally not intended to replace or override site-specific assessments; conversely, they are intended to highlight areas that would warrant such assessments as necessary.