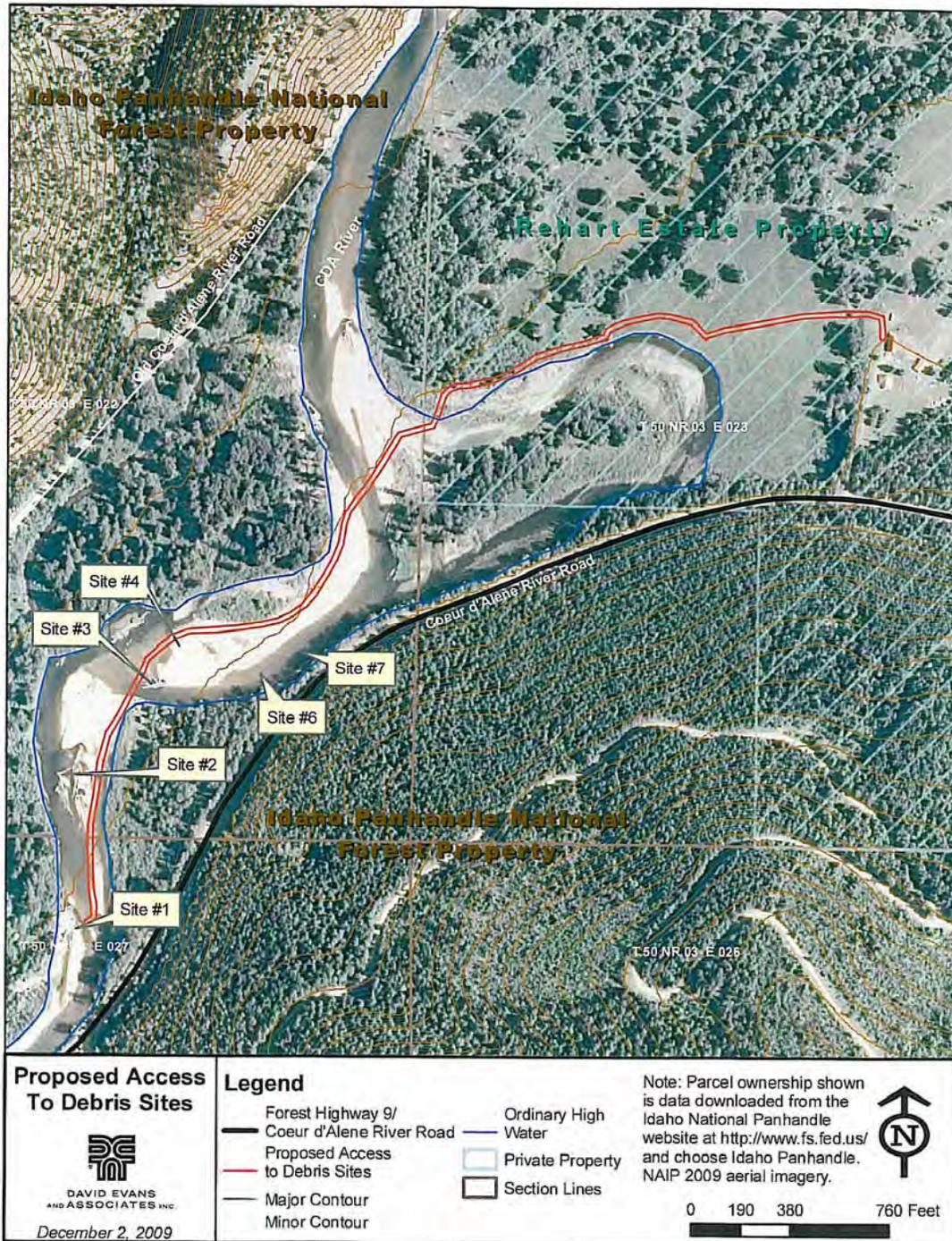


The Challenge of Managing Large Woody Material and Protecting Water Quality in the NF Coeur d'Alene River System

January 28, 2010

Kajsa Stromberg, IDEQ

Prepared for NFCDA Watershed
Advisory Group



- Large woody material and log jams in the North Fork Coeur d'Alene River near Cinnabar Cr. and Mile Marker 17.

- Site of drowning deaths in 2009 and other incidents.

- Project by Idaho Bureau of Homeland Security and Shoshone County to address public safety.

- County sought an effective solution while minimizing environmental impacts.

- Difficult task!



Site 1 - October 2009



Site 2 – October 2009



Sites 6 & 7 – October 2009



Logs extending into river channel were cut to reduce boating hazard.
Wood on banks was not disturbed.



Minimal equipment was used during low water on frozen ground and cobble substrate to minimize impacts to substrate and prevent turbidity.



Site 1 – January 2010

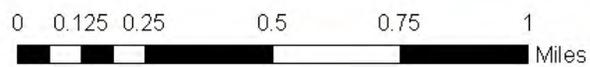
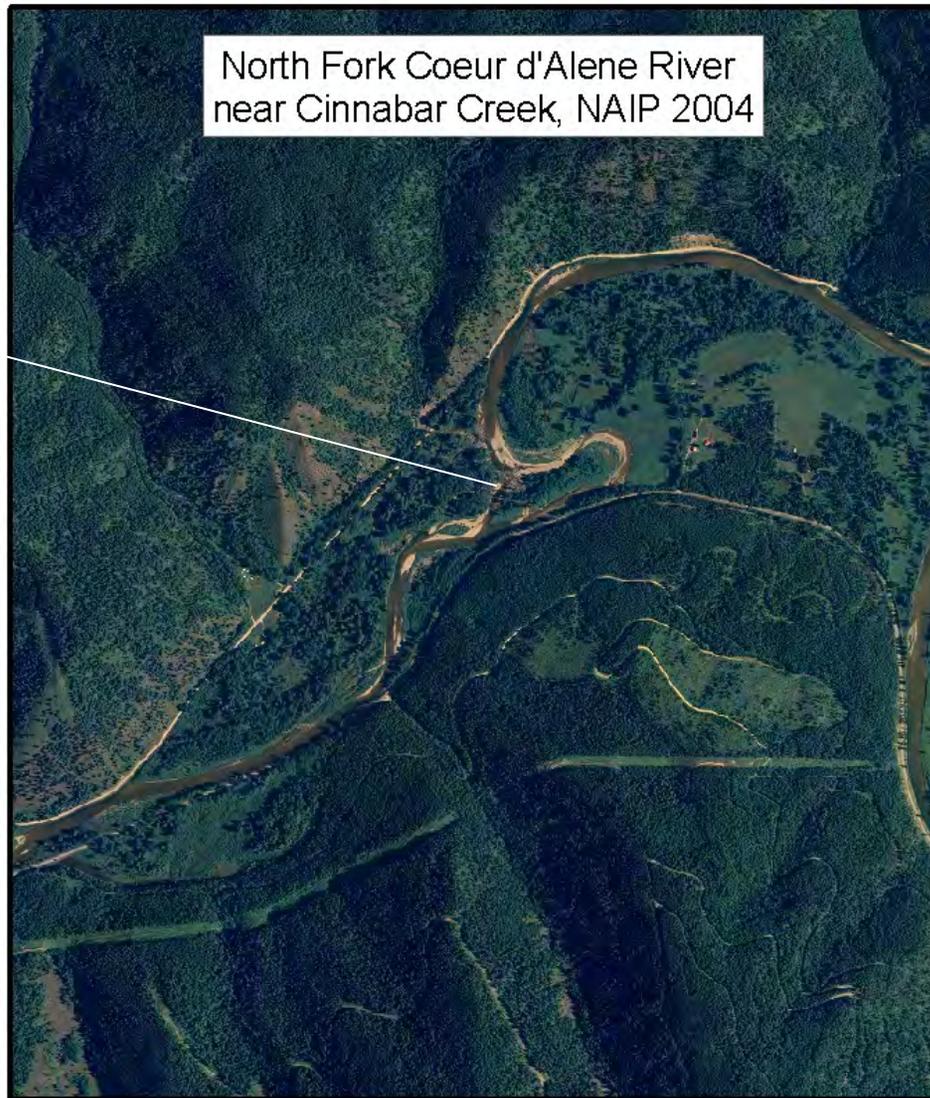


Site 2 – January 2010



Logs and branches were removed to reduce floating hazard. Root wads with varying lengths of logs attached were left in channel for habitat and substrate stabilizing functions.

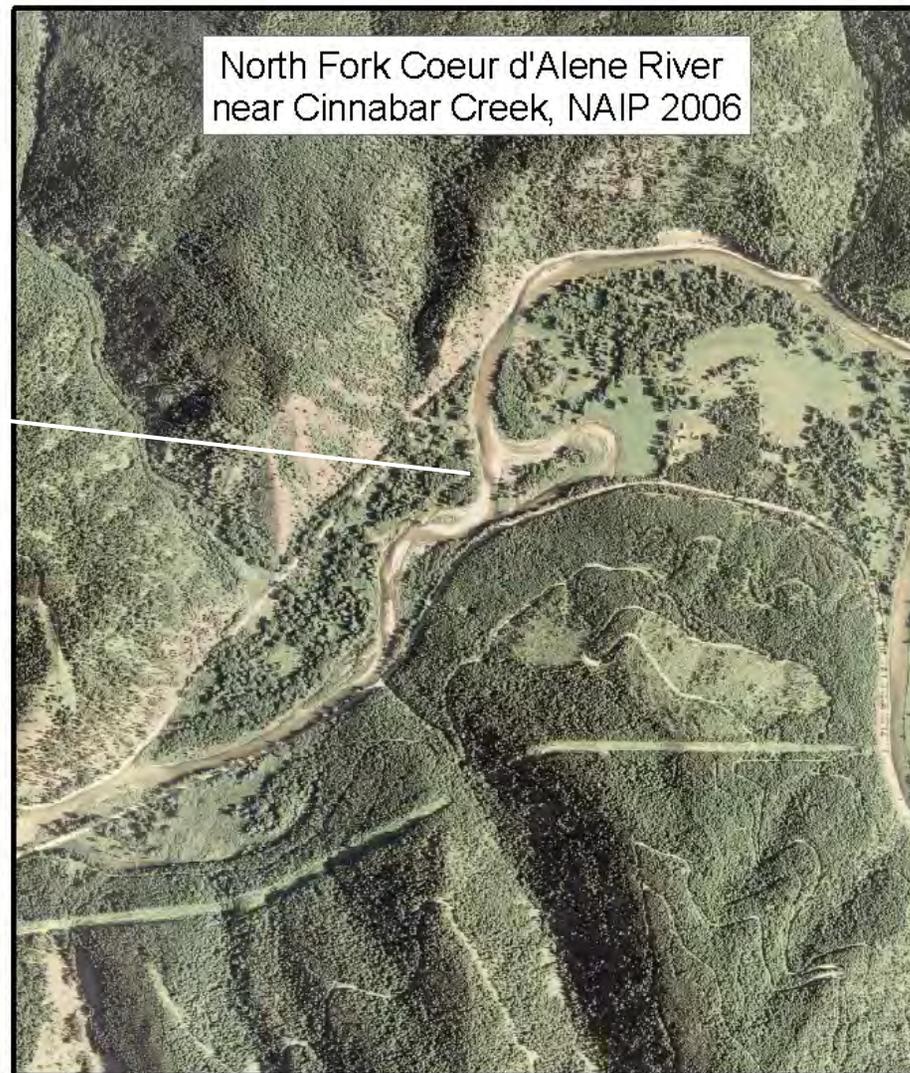
Log jam visible
in 2004 aerial
photo.



11/09/2009



By 2006 aerial photo, the log jam was no longer in this location and channel shifts are observed.



0 0.125 0.25 0.5 0.75 1 Miles

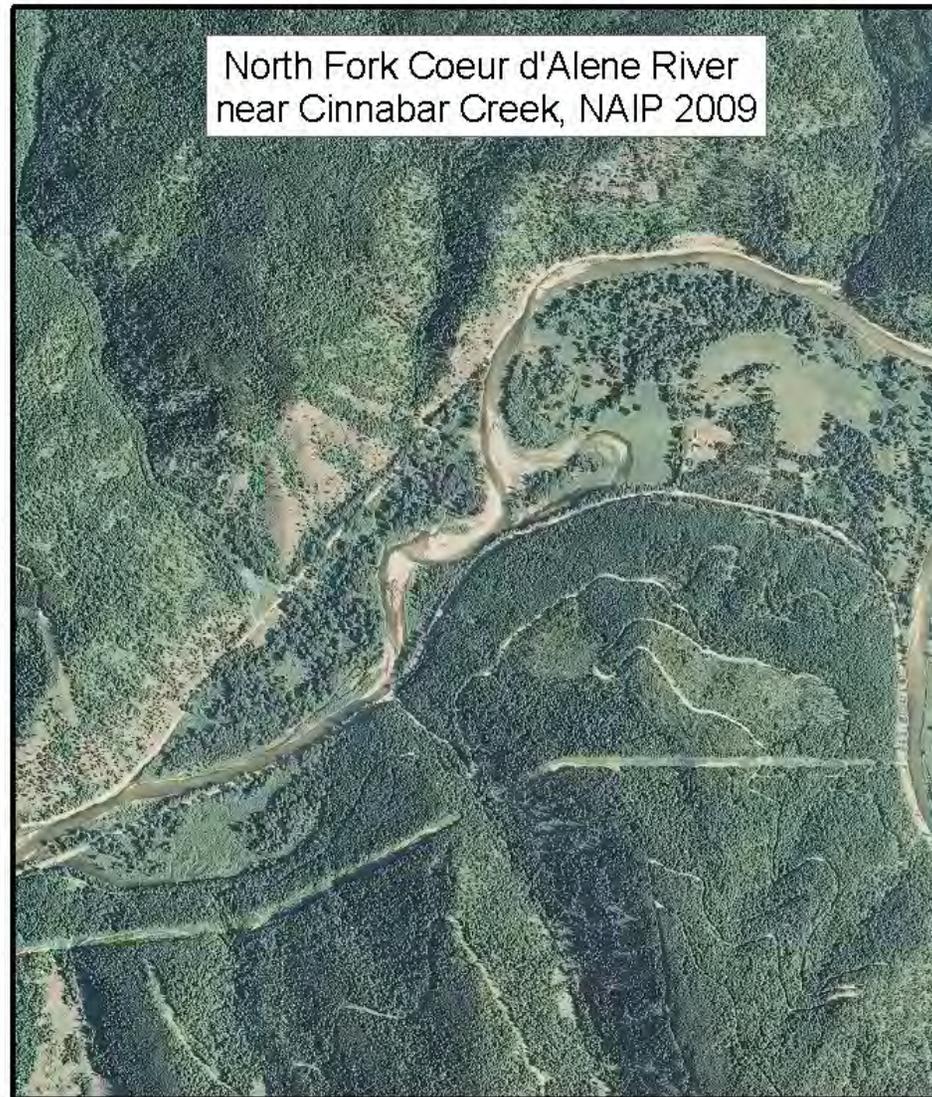
11/09/2009



2009 satellite images show large shifts in channel in this very dynamic reach of the NFCDA River.

DEQ suggests photomonitoring to evaluate effects of wood management

USFS is adjacent landowner.



11/09/2009



Example photomonitoring – Castle Rock



Woody material and log jam at Castle Rock removed in 2008. Photo: Sept. 2008

Example photomonitoring – Castle Rock

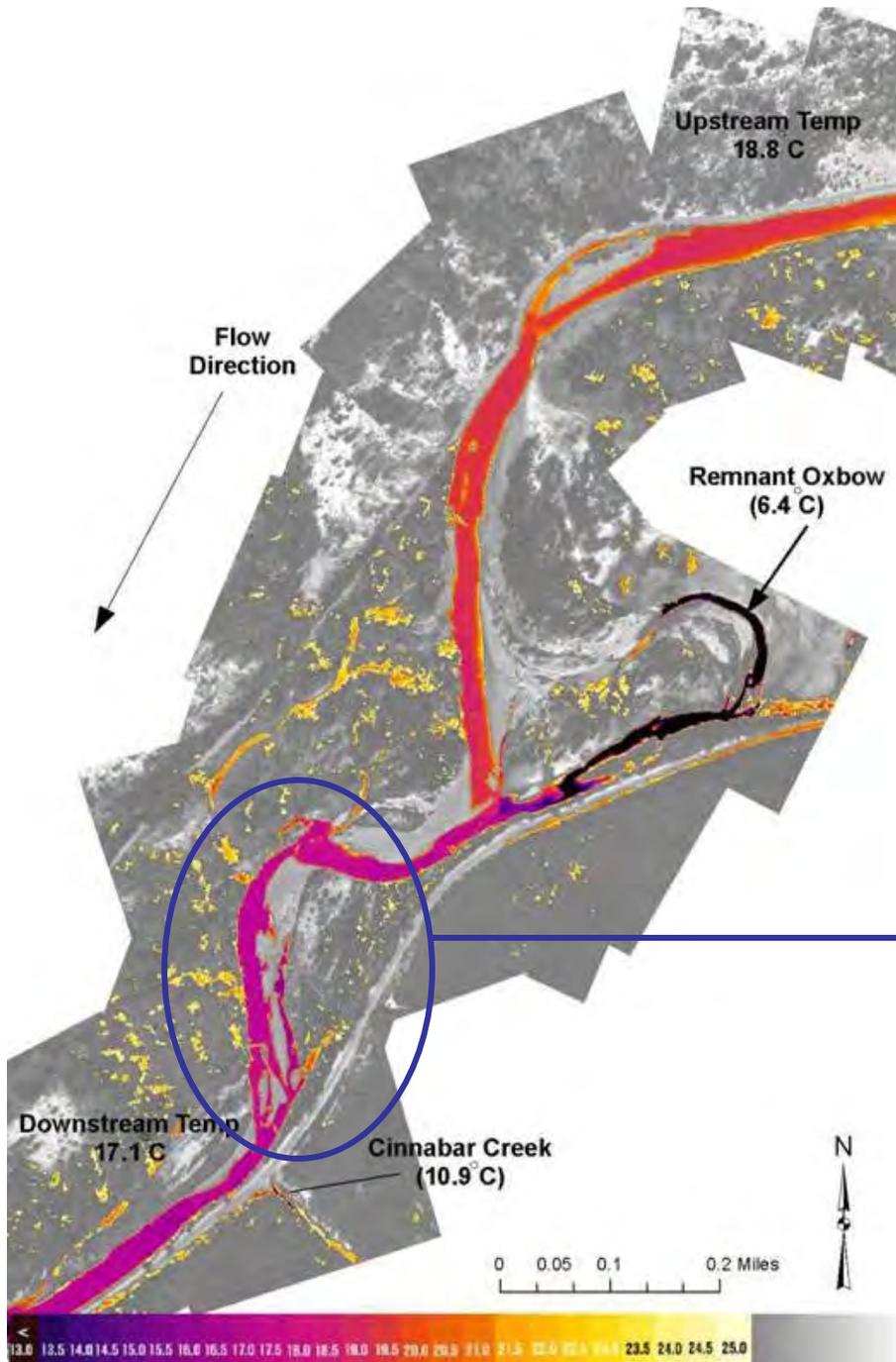


Removal site at Castle
Rock - October 2008

Example photomonitoring – Castle Rock



Removal site at Castle Rock
September 2009 – One year later



Temperature study, 2007

DEQ suggests future temperature monitoring in this reach.

Integrate with interagency snorkel survey fisheries information.

Log removal and management area

Challenges remain...



Cinnabar Creek culvert –
January 2010



Failing culvert and eroding road bed / river bank. Future projects may include bank stabilization projects and replacement of the culvert with a bridge at Cinnabar Creek. All of these issues are significantly related to water quality.

