Confederated Colville Tribes (CCT) Participatory GIS Project: Incorporating Tribal Values into Fuels & Wildfire Management

Key Contacts:

Monique Wynecoop, Forest Fire Ecologist, CNF Supervisor's Office, monique.wynecoop@usda.gov Fernando Sanchez-Trigueros, University of Arizona, School of Geography & Development, fernando.sanchez.trigueros@gmail.com Chasity Watt, Colville Tribes IRMP Coordinator chasity.watt@colvilletribes.com/ chasity.watt@bia.gov

Author of Report: Monique Wynecoop

Date: Jan 2016-Jan 2018

Locations: Confederated Colville Reservation and Colville National Forest Collaborative Forest Landscape Restoration Project Area

Purpose:

In order to build and maintain trust and transparency, it is important to make sure that we involve our local tribal communities in our project planning and implementation as early as possible to help identify socio-economic values effected by CNF management practices, determine what management techniques and locations are beneficial or detrimental to the tribal community, and work with the local tribes to incorporate input into our planning and implementation to foster adaptive management and shared learning.

Outcome:

The potential uses are ongoing. In 2017-2018, the PGIS heat map helped back the decision of our line officers to move forward with non-commercial fuels reduction treatments proposed within inventoried roadless areas within the Sanpoil Project Area.

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Maps below: Areas where PGIS participants (n = 37) felt that fuels treatments could be applied (A), and where fuels treatments should be avoided (B) on the Northeast Washington Collaborative Forest Landscape Restoration Area project area (black outline) of the Colville National Forest, USA. The color scale on the lower right corner of the maps represents the proportion of PGIS participants that identified an area as benefiting from treatments or as a place where fuels treatments should be excluded for which 0 is none of participants and 1 is 100% of participants. The interviews took place in the towns of Nespelem, Inchelium, and Keller, Washington, USA, November through December 2015 following the 2015 North Star Fire that burned a significant portion of the CCT Reservation. (Wynecoop *et al.* 2019)



Areas to Apply Treatments

- •Focus around CCT and Canada borders
- •Exterior borders of North Half Indian allotments
- •Pre-commercial thinning and prescribed fire treatments
- •Fuels reduction and removing dead and down trees for gathering cultural plants(to improve access and quality)
- •Reduce down timber and lodgepole regen for miles on Sherman Pass
- •South facing slopes, corridors, ridges
- •Remove heavy dead/down to improve big game hunting
- Increase access

Areas to Avoid Treatments

- •Sacred Areas and cultural sites
- •Historic Cultural Sites
- •Riparian areas and waterways

•Comments that areas along Hwy 20, Coyote Cr., Trout Lake, Sherman Cr. have been thinned too much and wildlife have left

Spokane Tribe of Indians (STOI) Participatory GIS Project: Incorporating Tribal Values into Fuels & Wildfire Management

Key Contacts:

Monique Wynecoop, Forest Fire Ecologist, Colville National Forest, monique.wynecoop@usda.gov Fernando Sanchez-Trigueros, University of Arizona, School of Geography & Development, fernando.sanchez.trigueros@gmail.com Vernon Stearns, Fuels Manager, Spokane Tribe of Indians (STOI), verns@spokanetribe.com

Author of Report: Monique Wynecoop

Timeframe: Jan 2017-Jan 2018

Locations: Locations: Confederated Colville Reservation and Colville National Forest Collaborative Forest Landscape Restoration Project Area

Purpose:

In order to build and maintain trust and transparency, it is important to make sure that we involve our local tribal communities in our project planning and implementation as early as possible to help identify socio-economic values effected by CNF management practices, determine what management techniques and locations are beneficial or detrimental to the tribal community, and work with the local tribes to incorporate input into our planning and implementation to foster adaptive management and shared learning.

Outcome:

Though there weren't any comments regarding the Colville National Forest CFLRP Project Area, the input regarding management practices, suppression tactics, and locations helps us have a conversation about Spokane Tribal concerns related to fuels and fire management impacts.

In 2018, the resulting PGIS heat maps were utilized by the Spokane Tribe Fuels Manager to propose and implement mechanical thinning and prescribed fire treatments around the West End Community on the Spokane Reservation! It was amazing that both agencies were able to see shared benefits from this project and it wasn't just one-sided, but rather a team effort for shared learning. I believe this project opened the door for improved communications between our agencies and the community.

STOI PGIS (Continued...)

Map of the 2015 Carpenter Road Fire (top photo, online source: Inciweb) and photo of the 2016 Cayuse Mountain Fire (bottom photo, online source: NWCC Info), that burned a significant portion of the Spokane Reservation and their managed timber stands, leading to the STOI Fire Program sending out a call for research and project proposals that would help them collaboratively address current management issues related to fuels and fire.



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Maps below: Areas where PGIS participants (n = 21) felt that fuels treatments could be applied (Left photo) and where fuels treatments should be avoided (Right photo). The color scale on represents the proportion of PGIS participants that identified an area as benefiting from treatments or as a place where fuels treatments should be excluded. The darker the color, the higher the proportion of answers related to that area. The interviews took place in person in the town of Wellpinit, Washington, USA, and also via an online link shared through the local tribal newspaper November through December, 2017 following the 2016 Cayuse Mountain & 2015 Carpenter Road Fires, that burned a significant portion of the Spokane Reservation August, 2016.



Areas to Apply Treatments

- •Firebreaks/ reduce crown fire spread
- •Focus around WUI areas
- Focus around campgrounds, beach and river access areas, and sacred/prayer site access
 Promoting wildlife habitat
- •Trust that the Spokane Tribal Fire Management is protecting water, cultural, and prayer sites from damage related to fuels reduction treatments or wildfire

Areas to Avoid Treatments

•Concern for firefighter exposure and health around mines (Midnight mine and Bluecreek area)

•Some concern regarding roads from commercial thinning or timber sales opening up areas to increased OHV and automobile use.

•Concern about wildfires burning too hot and damaging timber, firewood, and some cultural sites

•Recommendations to avoid further damage to and allow recovery within wildfire or recently logged areas

STOI PGIS (Continued...)

"For the Spokane Tribal perspective, it really boils down to upholding the trust responsibility to tribal members, from past to present to future. The unique aspect of tribal management is the limited scope of those we serve, which is our respective tribal membership. Tribal land managers are directly accountable to our membership, and action or inaction rarely goes unnoticed. Although the lands we live on today are remnants of our past, our social, cultural, and economic ties to the land remain much the same. Our ancestors made sacrifices that many of us today still struggle to understand, yet we know part of the sacrifice was to ensure our people will always have a place to call home. We must honor that sacrifice from the past by acting in the present for the benefit of the future.

The devastation experienced during the 2015 Carpenter Road and 2016 Cayuse Mountain Fires was felt throughout our communities on the Spokane Indian Reservation. We all own the risk posed by wildland fire, so we all must own part of the mitigation effort. Who better to give land management direction other than those who live and depend upon the land?

I feel like the goals of trust responsibility were met through this collaborative effort."- Vernon Stearns Jr., Spokane Tribe Fuels Manager

Below: Diagram showing how monitoring, such as the PGIS project maps developed in collaboration with the CCT and STOI can facilitate adaptive management. The process of collaboration never ends, but is a constant circle that requires time and commitment to effective communication from all parties involved. (diagram created by Monique Wynecoop)

