Application Name: Lower Limber Jim Restoration Project

By: Grande Ronde Model WS Foundation

Offering Type: Open Solicitation

Application Type: Restoration

OWEB Region: Eastern Oregon
County: Union
Coordinates: 45.089194,-118.339588

Applicant:
Jesse Steele
1114 J Avenue
La Grande OR 97850-2073
(541) 663-0570
jesse@grmw.org

Payee:
Mary Estes
1114 J Avenue
La Grande OR 97850
(541) 663-0570
mary@grmw.org

Project Manager:
Joe Platz
3502 HWY 30
LaGrande OR 97850
(541) 962-8571
jplatz@fs.fed.us

Budget Summary:
OWEB Amount Requested: $0
Total Project Amount: $0

Administrative Information

Abstract

Provide an abstract statement for the project. Include the following information: 1) Identify the project location; 2) Briefly state the project need; 3) Describe the proposed work; 4) Identify project partners.

The Lower Limber Jim Creek Restoration Project is located on Limber Jim Creek, tributary to the Grande Ronde River. The project is located on approximately .6 mile of Limber Jim Creek (RM 0 - .6). Limber Jim Creek is spawning and rearing habitat for Snake River Basin chinook salmon, summer steelhead, bull trout and redband trout. Historic timber harvest and grazing, roading and mining reduced the future recruitment of large wood and the amount/types of riparian vegetation. These combined impacts also changed pool/riffle ratios, residual pool depth, habitat complexity, and floodplain function. The project would place wood within .6 mile of Limber Jim Creek. All disturbed areas will be seeded and mulched after project completion. Monitoring will include established photo points. Project partners include US Forest Service, Bonneville Power Administration and Grande Ronde Model Watershed.

Location Information

What is the ownership of the project site(s)?

❑ *Public land (any lands owned by the Federal government, the State of Oregon, a city, county, district or municipal or public corporation in Oregon)*

✓ *Private (land owned by non-governmental entities)*

Please select one of the following Landowner Contact Certification statements:

● I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record.

❍ I certify that contact with all participating private landowners was not possible at the time of application for the following reasons: Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

Please include a complete list of participating private landowners

Marilyn Schiller
69958 Schiller Drive
Echo, OR 97826

❑ *This grant will take place in more than one county.*

Permits

Other than the land-use form, do you need a permit, license or other regulatory approval of any of the proposed project activities?

● Yes
❍ No

For Details Go to Permit Page

I acknowledge that I am responsible for verifying applicable permits, licenses, and General Authorizations required for the project, and can update information at grant agreement execution.

✓*Yes*

Racial and Ethnic Impact Statement

Racial and Ethnic Impact Statement

❍ The proposed grant project policies or programs could have a disproportionate or unique POSITIVE impact on the following minority persons. (indicate all that apply)

❍ The proposed grant project policies or programs could have a disproportionate or unique NEGATIVE impact on the following minority persons. (indicate all that apply)

● The proposed grant project policies or programs WILL HAVE NO disproportionate or unique impact on minority persons.

Insurance Information

❑*Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)*

❑*Earth moving work around the footprint of a drinking water well*

❑*Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)*

❑*Applicant's staff or volunteers are working with kids related to this project (DAS Risk assessment tool not required, additional insurance is required)*

❑*Applicant's staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance is required)*

Additional Information

❑ *This project affects Sage-Grouse.*

Problem Statement

Describe the watershed problem(s) that this restoration project seeks to address.

Overall Problem: Lower Limber Jim Creek and its meadow habitats are not in proper functioning ecological condition (hydrologic, geomorphic, vegetative composition), due to historic management that included beaver trapping, over grazing, logging, road building, and an altered fire regime.

Sub-problem 1 - Floodplain form and function
The Lower Limber Jim Creek floodplain has limited water capture and retention capacities due to past anthropogenic influences. These deficiencies have lowered ground tables. This has resulted in lower riparian vegetation survival and vigor, a decreased ability to store water and buffer water temperature, less connection to the floodplain to moderate in-channel velocity, and lower quality salmon habitat. Lack of floodplain form and function has resulted in a:
* decrease in water storage and meadow/wetland habitats, resulting in drier site and mesic-site species encroachment. Drier habitats are less conducive to riparian deciduous woody vegetation species (Populous and Salix) that are important food and habitat for beaver populations.
* potential increase of in-stream water temperatures from a decrease in groundwater recharge, which can be problematic for salmonids.
* increase of in-channel velocity where the channel has downcut, and doesn't spread water out onto the floodplain during high flows. The process of downcutting causes vertical erosion, which increases fine sediment levels and decreases habitat complexity.
* decrease in the amount of of zero velocity habitat, which provide juvenile salmonids protection, temperature buffering, food sources and feeding areas, and resting areas.
Sub-problem 2 - Fish habitat complexity:
Lower Limber Jim's fish habitat complexity (cover, pool quality/quantity, zero velocity habitat, and spawning gravel recruitment) is limited.
* Channel incision and lack of instream woody material has affected the quantity and quality of spawning, rearing, and overwintering habitat in Lower Limber Jim Creek.

How have past or current land management practices contributed to the problem?

Historic trapping, overgrazing, logging, road building, and an altered fire regime have degraded Lower Limber Jim Creeks' watershed's ecological form and function. The loss of functional meadow and stream habitat adversely affects the survival and rearing of native salmonids, other fish, and wildlife species.

Beaver trapping pressure in the 19th Century almost caused extirpation of this species in the western United States. The decrease in beaver populations on Lower Limber Jim Creek has contributed to channel incision, decreased habitat complexity, altered vegetative communities, and an altered flow/temperature regime. Beaver serve as ecological engineers by building dams that decrease the velocity of peak flows and spread flows out over longer periods of time. This increase of water retention time decreases erosive forces that cause stream incision. Higher levels of surface and subsurface water retention expands riparian and wetland habitat along the stream. As beaver move in and out of systems, numerous side channels often form, and more woody vegetation ends up in the stream. This leads to increased habitat complexity for fish and wildlife.

Historic overgrazing of sheep and later cattle reduced deciduous vegetation communities around Lower Limber Jim Creek. Overgrazing has also caused bank erosion, channel overwidening, and soil compaction. This has caused vertical erosion and channel incision. Channel incision has altered the Lower Limber Creek system by lowering streambeds and groundwater tables causing a further decrease in riparian vegetation. Currently, the stream is grazed by domestic livestock and wild ungulates (elk and deer).

Historic logging practices caused a variety of problems in the Upper Grande Ronde watershed. The removal of

wood from the system likely resulted in less in-stream large woody debris (LWD). Part of the Limber Jim Creek Basin is likely affected by this issue. It is important to note that the meadow reaches of the stream may not have had a large amount of large diameter wood historically, but did have abundant small diameter wood and beaver dams/lodges.

High densities of roads near Limber Jim Creek and its meadows have likely caused a variety of compounding problems. Impermeable road surfaces increase the rate of overland flow. This affects the timing and volume of flow in downstream areas of the watershed. Roads that are built on the sides of meadow systems (which is the case on Lower Limber Jim Creek) often result in long-term soil compaction. The soil compaction can lead to a reduction in water holding capacity and infiltration into nearby meadow systems.

Altered natural and human ignited fire (Native American and sheep herders) regimes due to 20th century fire suppression have likely affected the vegetative, hydrologic, and geomorphic processes of montane meadow systems like Limber Jim Creek. Less frequent intense wildfires are more likely to have negative effects on meadows (erosion in uplands) than more frequent low-intensity fires. Historically, naturally caused and human ignited low intensity fires were likely more common. Conifer encroachment due to lack of regular fire intervals has caused dense under and mid-story fir/pine species on the edges of meadows and in some cases all the way up to the Limber Jim Creeks' streambank. This early stage forest ecosystem dynamic increases competition for large tree regeneration, and contributes to meadow water loss through evapotranspiration. The restoration of Limber Jim Creeks' form and function will address a combination of these interrelated problems through a physical approach to creek and meadow restoration.

Project History

Continuation - Are you requesting funds to continue work on a project previously funded by OWEB where that work did not result in a completed project?

❍ Yes
● No

Resubmit - Have you submitted, but were not awarded an OWEB application for this project before?

❍ Yes
● No

Phased - Is proposed work in this application a phase of a comprehensive watershed restoration plan or project?

❍ Yes
● No

Plans and Salmon

Is the proposed restoration activity(ies) identified in a local assessment or other plan?

● Yes
❍ No

Provide name of local plan, Watershed assessment or other locally relevant document.

The project is located in the Upper Grande Ronde Restoration Atlas. The Upper Grande Ronde Atlas is a geo-spatial restoration prioritization plan developed in coordination with BPA by local fish biologists, researchers, engineers, hydrologists, practitioners, and stakeholders. The plan divides the subbasin into biologically significant reaches (BSR) and prioritizes those reaches for restoration based on fish use, fish life stages, limiting factors, and floodplain availability. The BSR are associated with restoration actions. Each reach is assigned a Tier with Tier 1 being the highest priority and Tier 3 being the lowest priority. The Lower Limber Jim Creek project area is within a Tier 2 BSR.

Will this project benefit salmon or steelhead?

● Yes
❍ No

✓Snake River Basin - Steelhead
✓Snake River Spring/Summer-run - Chinook Salmon

How will the resulting restoration project benefit salmon or steelhead or their habitat?

The project will increase habitat complexity, increase off-channel habitats, lower stream temperatures, increase riparian vegetation (shade, cover), and improve floodplain function.

Does the project address a restoration action identified in a regional assessment or recovery plan?

❍ Yes
● No

Does this project address one or both of the following:

✓*Habitat needs for one or more Endangered Species Act-listed species and/or species of concern*
❑*Concerns identified on 303(d) listed streams*
❑*No*

Proposed Solution

Goal, Objectives, and Activities

State your project goal. A goal statement should articulate desired outcomes (the vision for desired future conditions) and the watershed benefit.

Overall Goal: To achieve proper ecological form and function of Lower Limber Jim Creek and its meadows, and restore habitat for the Snake River Basin Spring/Summer Chinook and Snake River Basin Steelhead.

Subgoal 1: Physical - Restore Hydrologic Function
In the meadow reach (Rosgen channel type C and E) increase hydration of laterally confined channel to improve groundwater retention. Use Large Woody Debris (LWD) to restore stream grade, reduce hydraulic efficiencies, and increase floodplain meadow inundation time. LWD structures will be placed in locations to increase roughness and back up water.

Subgoal 2: Biological - Improve Fish Habitat
Restore channel habitat complexity. LWD structures will be constructed. These structures will enhance scour pool habitat, cover, and floodplain connection. The structures will increase hydraulic complexity and zero velocity refugia on active channel margins.

List specific and measurable objectives. Objectives support and refine the goal by breaking it down into steps for achieving the goal. (NOTE: If you quantify your objectives, ensure all numbers match the metrics listed in your selected habitat types.) Provide up to 7 objectives.

Objective #1

Objective

Hypothesis 1: If channel spanning wood structures using trees and racking material are constructed in strategic locations to slow down and back up stream flows then:
- 2 years post implementation 25% more of the floodplain will be inundated in the summer season (June -July) than in 2019.
- Water storage will be quantified in terms of acres of inundated floodplain using drone technology.
Strategy and Objectives 1: Mimic beaver dam function at pool tails and in areas where accessible side channel habitats exist by constructing channel spanning wood structures to:
- Deflect water into the floodplain for groundwater storage (hyporheic
activity) and off channel fish habitat
- Back water into existing fish habitat structures
- Recruit fluvially sorted wood
- Promote gravel deposition and spawning gravel recruitment
- Recruit deciduous vegetation by increasing groundwater storage
- Improve habitat for future use by beaver populations
- Decrease conifer encroachment in Limber Jim Creek

Hypothesis 2: See hypothesis 1
Strategy and Objectives 2: Restore floodplain function by placing floodplain wood to:
- Deflect, retain, and capture water once it reaches the floodplain
- Recruit deciduous vegetation through groundwater storage
-- Improve habitat for future use by beaver populations
No hypothesis will be tested for objectives 3

Strategy and Objectives 3: Place whole trees to:
- increase habitat complexity
- fish cover

Describe the project activities. Activities explain how the objective will be implemented.

The project would construct channel spanning debris jams at 6 sites and habitat structures at 24 sites within the lower .6 mile of Lower Limber Jim Creek (RM 0 – RM .6). This would include approximately 216 pieces of large wood (~ 7 pieces of large wood per structure and 30' long) and 720 yards of racking material. An additional 73 whole trees would be placed within the stream and 100 pieces of wood would be placed on the floodplain. All of the wood will be placed with excavators/log loaders. No digging or trenching of large wood or racking material will occur. Access for machinery to the stream would occur via 5125 and the 5130 roads.

There will be 200 trees removed from 2 miles of the 5130021 road. All of the trees will be removed within 20' of the road prism. These trees will have rootwads attached and will be plucked or pushed over. An additional 100 trees will be felled, plucked or pushed over and removed from private lands (adjacent to the 5130 road and within 300' of Limber Jim Creek). All of the racking material will be obtained from the 5130021 road. No trees over 21" dbh will be plucked, pushed over, or felled for the project.

• The channel spanning debris jam structures (Type 1 Limber Jim structures) will consist of 2: 13-18" logs with rootwads, 3: 10 – 13" logs with rootwads, 2 : 8" – 15" diameter tops or small rootwads and 4: ten yard loads of racking material.

• The habitat structures (Type II Limber Jim Structures) will consist of 1: 13-20" logs with rootwads, 3: 10 – 13" logs with rootwads, 3 : 8" – 15" diameter tops or small rootwads and 2: ten yard loads of racking material.

• All of the disturbed areas will be seeded and mulched, where applicable.

The project will occur from May 18– November 6 of 2020. All of the instream work will occur in July. Tree removal and haul from roads will occur from May 18 – June 30. Tree removal adjacent to Limber Jim Creek will occur from June 1 through June 30. Rehabilitation, seeding and mulching will occur from May 17 – November 6.

List the major project activities and time schedule for each, including post project implementation.

Element	Description	Start Date	End Date
Tree removal and stage	Trees will removed and staged adjacent to Limber Jim Creek	5/2020	6/2020
Fish structure construction	Construct fish structures (24 log spanning jams and 5 habitat structures) within the stream.	7/2020	7/2020
Rehabilitation, seeding and mulching	Rehabilitation, seeding and mulching	5/2020	11/2020

Element	Q2 2020	Q3 2020	Q4 2020
Tree removal and stage			
Fish structure construction			
Rehabilitation, seeding and mulching			

Habitat Types

In which habitat type(s) are you proposing to work?

✓*Instream Habitat: below the ordinary high water mark (includes in-channel habitat restoration, bank stabilization, flow, fish screening, and fish passage) -- Details will follow.*

✓*Riparian Habitat: above the ordinary high-water mark of the stream and within the stream's floodplain. -- Details will follow.*

❑*Upland Habitat: above the floodplain and improves native habitat and watershed function.*

❑*Wetland Habitat: land or areas covered, often intermittently, with shallow water or have soil saturated with moisture.*

❑*Estuarine Habitat: tidally influenced areas.*

Instream Habitat

Select all applicable Instream categories.

❑**Bank stabilization**

❑**Fish passage improvement**

❑**Fish screening project**

❑**Instream Flow**

✓**Instream habitat restoration**

Select all the actions you propose to implement to address the problem.

✓*Placement of materials in channel*

Does the proposed project follow:

✓*ODFW Guidelines*

✓*NOAA Guidelines*

❑*Other*

What types of instream habitat materials are you proposing to install? (select all that apply)

✓*Large wood*

Number of structures.
30

Average number of logs per structure.
7

Average length of logs per structure (feet)
30

Average diameter of logs per structure (feet)
1

❑*Boulders*

❑*Combination log/boulder*

❑*Other materials: Materials that stabilize the streambed*

❑*Channel reconfiguration and connectivity, including alcoves and side channel reconnection*

❑*Spawning gravel placement*

❑*Beaver reintroduction*

❑*Non-native plant control*

❑*Nutrient enrichment*

❑*Animal species removal*

Is the primary purpose of the instream habitat restoration treatment(s) to address water quality limiting factors?

❍ Yes

● No

Total miles of stream to be treated with all instream habitat restoration treatments
.6

❑**Stockpiling logs**

Riparian Habitat

Select all applicable Riparian categories.

❑**Riparian road activities**

❑**Fencing and other materials for habitat protection**

✓**Vegetation establishment or management**

Select all the actions you propose to implement to address the problem.

❑*Planting*
❑*Non-native plant control*
❑*Prescribed burnings, stand thinning, stand conversions, silviculture*
❑*Juniper treatment*

❑**Livestock management**
❑**Debris and Structure Removal**

Is an objective of the riparian treatment(s) to address water quality limiting factors?

● Yes
❍ No

✓High Temperature

Total linear stream miles to be treated.
.6

Total riparian acres to be treated.
15

Left streambank miles to be treated.
.6

Right streambank miles to be treated.
.6

Wrap-Up

Watershed Benefit

Describe the watershed or ecosystem function(s) that the project will address through the proposed restoration actions and the resulting benefits to water quality, native fish and wildlife habitat, and/or watershed health. Explain why the project is a priority for investment at this time.

This project will increase floodplain inundation, habitat complexity, pool quantity/quality and side channel activation. The spring/summer chinook and summer steelhead need these habitat components and water quality improvements to improve spawning, rearing and migratory habitat. This project is a priority, due to the emphasis on Tier 2 projects within the Upper Grande Ronde River Watershed.

Public Awareness

Does this proposed project include public awareness activities?

❍ Yes
● No

Design

Were design alternatives considered?

❍ Yes
● No

Select the appropriate level of design for your project.

❍ No design is required.
❍ 10-30%: Conceptual design (evaluation of alternatives, concept-level plans, design criteria for project elements, rough cost estimates).
● 30-85%: Preliminary design (selection of the preferred alternative, draft plans, draft design report, preliminary cost estimates).
❍ 85-100%: Final design (final design report, plans, and specifications, contracting and bidding documents, monitoring plan, final cost estimate).

If work remains on the project's design, describe the work that remains to be done and when you expect to have it completed. If no design is required put "N/A"

The design will be 80% completed at the time of the proposal deadline. This will be sent separately to GRMW before the deadline. The finished product will be completed in December of 2019.

Describe the steps you will take to minimize adverse impacts to the site and adjacent lands during and after project implementation.

Project implementation will avoid wetlands, use existing/closed road prisms, and stay on existing designated skid trails where possible. All disturbed areas will be rehabilitated with an excavator to mimic natural conditions and add floodplain wood. The areas will also be seeded and mulched where erosion potential is high.

Project Management

List the key individuals, their roles, and qualifications relevant to project and post project implementation. At a minimum include the following: project management, project design, project implementation, and project inspection.

Role	Name	Affiliation	Qualifications	Email	Phone
Project design, implementation and inspection.	Joe Platz	USFS (Biological Technician)	Joe Platz is a biological technician for the US Forest Service. Joe Platz has a Bachelor of Science degree from OSU in Fisheries Science. He has been involved in designing and implementing restoration projects since 1989.	joe.platz@usda.gov	(541) 962-8571
Design	Sean Welch	Fish and Wildlife Engineering Technical Services Team Leader	Fish and Wildlife Engineering Technical Services Team Leader	spwelch@bpa.gov	(503) 230-7691
Design	Erin Ryan	USFS - Civil Engineer	B.S. in Civil Engineering (Bio-Resources)(MSU) & an M.S. in Civil Engineering (Hydraulic engineering/stream restoration/river mechanics)(CSU). EI licensed in MT & worked in the federal govt. for 5 years on fish restoration and passage projects.	erin.ryan@usda.gov	(406) 491-1262

Optional Monitoring

OPTIONAL: Restoration Project Monitoring

❑*Salmonid Monitoring*
❑*Non-salmonid biological monitoring*
❑*Water (quantity) flow monitoring*
❑*Water quality monitoring*
❑*Rangeland monitoring*
✓*Onsite*
❑*Downstream*
❑*Upstream*
❑*Upslope*

Will effectiveness monitoring be conducted for this project?

● Yes
❍ No

Please describe the monitoring activities and any additional sources of funding (amount and source) to support this effort.

(1) Structure construction: Monitoring of structures would involve photo points of before and after operations occur. Follow up photo points would occur at year 1 - 3 after project completion. This monitoring will be completed by the USFS.
(2) Noxious weeds: Noxious weeds would be monitored, yearly, for three years after project operations. This monitoring will be completed by the USFS.

Budget

Item	Unit Type	Unit Number	Unit Cost	OWEB Funds	External Cash	External In-Kind	Total Costs
Salaries, Wages and Benefits							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Contracted Services							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Travel							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Materials and Supplies							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Equipment							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Other							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Modified Total Direct Cost Amounts				$0	$0	$0	$0
Indirect Costs							
		0%			Indirect Cost Total: $0		
Total				$0	$0	$0	$0

* = OWEB funds excluded from indirect.

If the budget includes unusually high costs and/or rates, provide justification for those costs and/or rates.

If the budget identifies a contingency amount for specific line item(s) within the Contracted Services and Materials and Supplies budget categories, explain the specific reasons a contingency is needed for each line item. Contingencies are line-item specific and cannot be used for other costs.

Funding and Match

Fund Sources and Amounts

Organization Type	Name	Source Note	Contribution Type	Amount	Description	Status
Federal	United States Forest Service	Trees/labor	In-Kind - Materials	$21,000	Trees & Seed	Secured
Federal	United States Forest Service	Trees/labor	Cash	$20,692	NEPA & Design	Secured
Fund Source Cash Total	**$20,692**		**Fund Source In-Kind Total**	**$21,000**		

Match

Contribution Source-Type: Description	Amount
United States Forest Service-In-Kind - Materials: Trees & Seed	$0
United States Forest Service-Cash: NEPA & Design	$0
Match Total	**$0**

Do match funding sources have any restrictions on how funds are used, timelines or other limitations that would impact the portion of the project proposed for OWEB funding?

❍ Yes
● No

Do you need state OWEB dollars (not Federal) to match the requirements of any other federal funding you will be using to complete this project?

❍ Yes
● No

Does the non-OWEB cash funding include Pacific Coast Salmon Recovery Funds?

❍ Yes
● No

Uploads

Figures and Tables: Headwaters UGR Partnership - Lower Limber Jim Application Budget Template.pdf **- Budget**

Photos: Lower Limber Jim RESTORATION PROJECT.pdf **- Power Point**

Map: Restoration_LowerLimberJim_JPlatz_102019 (002).pdf **- Map**

Permit Page

Project Activity Requiring a Permit or License	Name of Permit or License	Entity Issuing Permit or License	Status
Instream wood placement	Regional General Permit and General Permit	Army Corps of Engineers & Department of State Land	Will obtain in March of 2020
Entire Project	NEPA	USFS	Will complete in February of 2020
Entire Project	ESA clearance	NOAA and USFWS	Will obtain in March of 2020

BUDGET

LOWER LIMBER JIM CREEK RESTORATION PROJECT

Totals automatically round to the nearest dollar

A	B	C	D	E	F	G	H
Itemize projected costs under each of the following categories:	**Unit Number**	**Unit Cost**	**Unit Type**	**BPA Funds**	**Cash Match**	**In-Kind Match**	**Total Costs**
	(e.g., # of days)	(e.g., daily rate)					(add columns D, E, F)
SALARIES, WAGES AND BENEFITS. List position titles, include only costs of employees charged to this grant.							
Biological Technician (Joe Platz)	21	$360	8 hr days	7,560			7,560
Project Engineer	15	$404	8 hr days		6,060		6,060
NEPA/Support Staff	40	$334	8 hr days		13,360		13,360
SUBTOTAL (1)			0	7,560	19,420	0	26,980
CONTRACTED SERVICES. Labor, supplies, and materials to be provided by *non-staff* for project implementation.							
Tree removal and stage contract	1	$45,000	contract	45,000			45,000
Log loader to construct structures	70	$210	hrs	14,700			14,700
Excavator to construct structures/rehab.	100	$165	hrs	16,500			16,500
SUBTOTAL (2)			0	76,200	0	0	76,200
TRAVEL. Mileage, per diem, lodging, etc. Must use current State of Oregon rates.							
USFS vehicle	40	$4.30	days		172		172
Truck mileage	2000	$0.55	miles		1,100		1,100
SUBTOTAL (3)			0	0	1,272	0	1,272
MATERIALS/SUPPLIES. Refers to items that are "used up" in the course of the project. Costs to OWEB must be directly related to the implementation of this grant.							
Trees (FS$)	200	$100	trees			20,000	20,000
Native Seed	100	$10	pounds			1,000	1,000
Trees (PVT)	100	$100	trees	10,000			10,000
SUBTOTAL (4)			0	10,000	0	21,000	31,000
EQUIPMENT/SOFTWARE. List portable equipment costing $300 or more per unit. Must remain property of a governmental entity, tribe, watershed council, SWCD, institution of higher learning or school district.							
							0
							0
SUBTOTAL (5)			0	0	0	0	0
OTHER. Costs must be necessary and reasonable for successful completion of this grant.							
							0

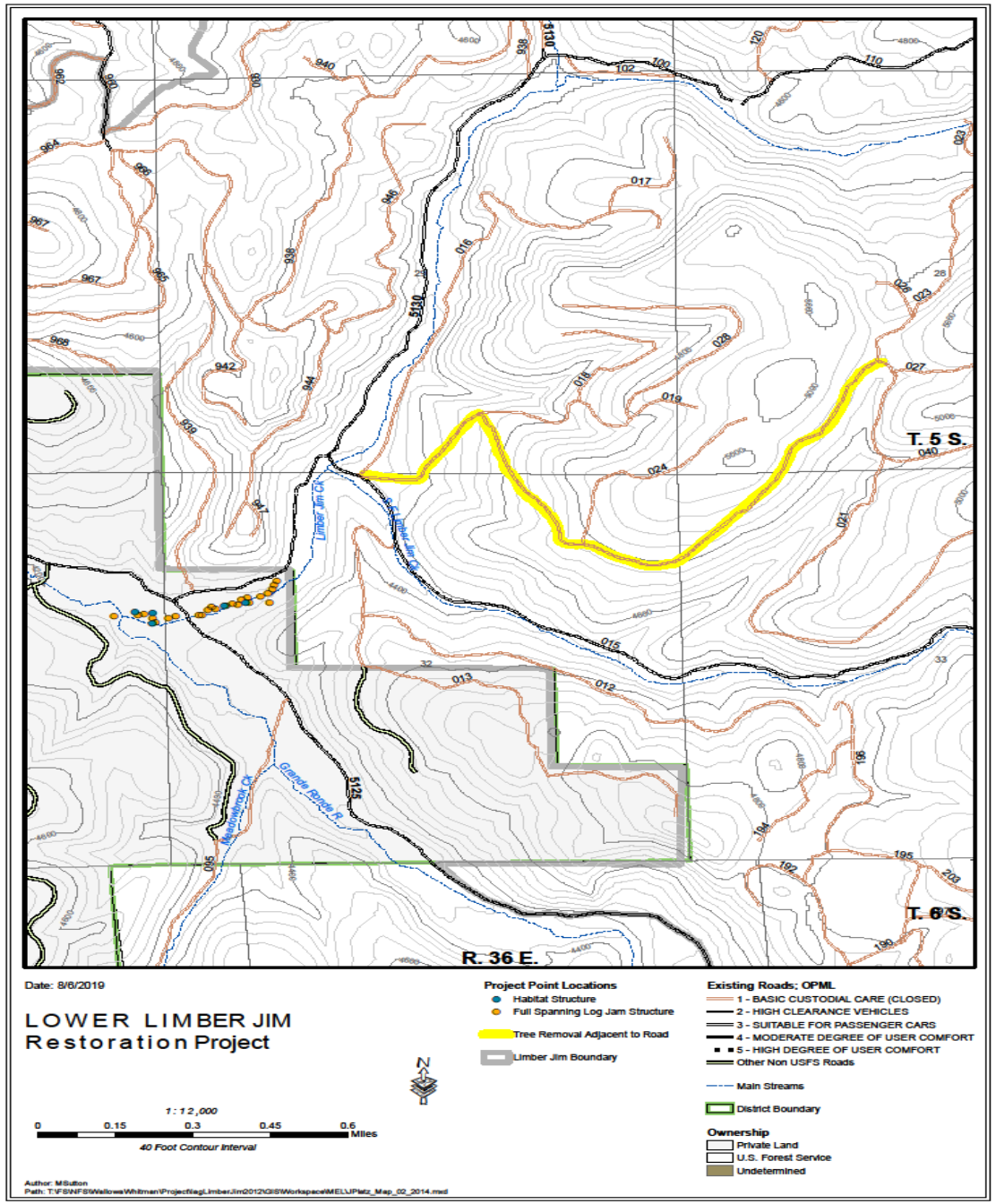
A	B	C	D	E	F	G	H
Itemize projected costs under each of the following categories:	**Unit Number**	**Unit Cost**	**Unit Type**	**BPA Funds**	**Cash Match**	**In-Kind Match**	**Total Costs**
	(e.g., # of days)	(e.g., daily rate)					(add columns D, E, F)
							0
		SUBTOTAL (6)	0	0	0	0	0
[Add subtotals above]		**MODIFIED TOTAL DIRECT COSTS (7)**	0	93,760	20,692	21,000	135,452

GRANT ADMIN. Select one of the methods below. Fill in the requested rate. Compute by multiplying MTDC (7) line by this rate.							
Federally Negotiated Indirect Cost Rate	X	10%		9,376			9376
Federally Accepted 10% *de minimis*	☐						0
OWEB Negotiated Indirect Cost Rate	☐						0
		SUBTOTAL (8)	0	9376	0	0	9376
POST-GRANT. Pre-paid costs ($3,500 or less) that are associated with either post implementation status reporting or effectiveness monitoring or plant establishment costs. List each separately.							
Post-Implementation Status Reporting ($3,500 or	/yr						0
Effectiveness Monitoring ($3,500 or less)	/yr						0
Plant Establishment ($3,500 or less)	/yr						0
		SUBTOTAL (9)	0	0	0	0	0

GRANT BUDGET TOTAL ***Totals automatically round to the nearest dollar**

GRAND BUDGET TOTAL **[Add Totals (10), (11), and (12) as applicable]**	0	103,136	20,692	21,000	144,828

LOWER LIMBER JIM RESTORATION PROJECT



Project length: .6 mi.

Existing conditions:

(1) Private land (Schiller)

(2) Actively grazed by livestock.

(3) Affected by roading, timber harvest, livestock/wild ungulate grazing, and beaver trapping.

Lower Limber Jim Creek

- 2020 Construction
- Within UGR 18 Tier II
- Equipment accessible
- Trees and racking from closed road and onsite
- **Objectives:**

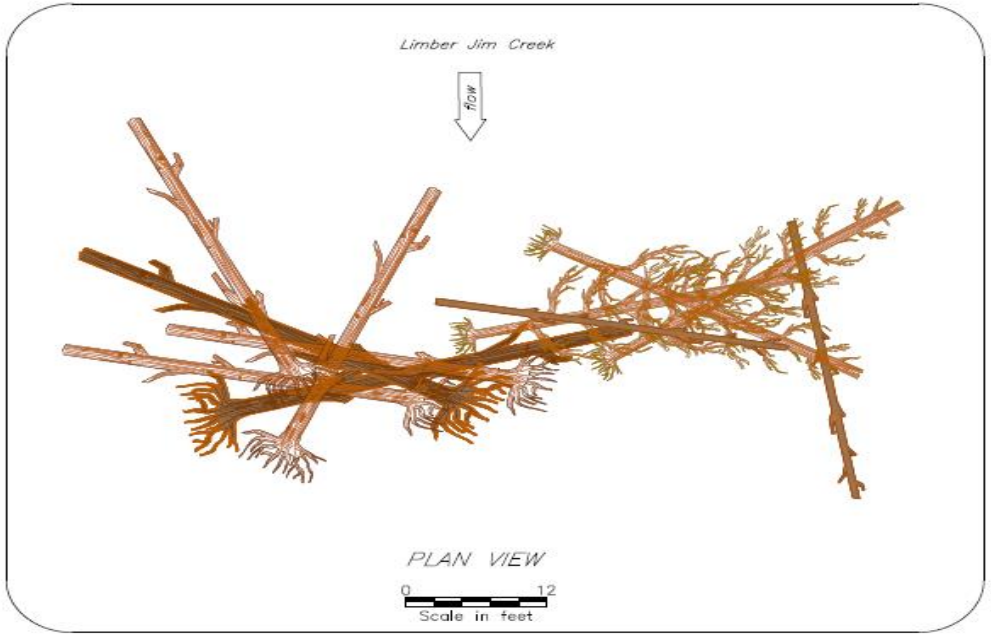
    Engage floodplain

    Habitat complexity

    Activate side channels

    Pool quality/quantity

Limber Jim Type 1 (log jam) Structure Type



MATERIAL SCHEDULE

ITEM	QUANTITY	DIA. (IN)	LENGTH (FT)	ROOTWAD (Y/N)
LARGE	2	18-20	30-35	YES - 3' DIA. MIN.
MEDIUM	4	15-18	30-35	YES
SMALL	5	8-10	20-30	OPTIONAL

CHANNEL SPANNING REFERENCE

CHANNEL SPANNING REFERENCE

Date
Designed JPeltz 11/2016
Drawn Jason Welch PE 11/2016
Checked X
Approved X
Title

TYPE 1 CHANNEL SPANNING STRUCTURE
LIMBER JIM STREAM AND FLOODPLAIN RESTORATION
UNION COUNTY, OREGON
WALLOWA WHITMAN NATIONAL FOREST, LA GRANDE RANGER DISTRICT

File Name
Limber Jim.DWG
Drawing No.
SHEET 9
Sheet 11 of X

Limber Jim Type 2 (Habitat) Structure Type

PLAN VIEW

0 12
Scale in feet

MATERIAL SCHEDULE

ITEM	QUANTITY	DIA. (IN)	LENGTH (FT)	ROOTWAD (Y/N)
LARGE	2	18-20	30-35	YES - 3' DIA. MIN.
MEDIUM	5	15-18	30-35	YES
SMALL	4	8-10	20-30	OPTIONAL

TYPE 2 REFERENCE

TYPE 2 REFERENCE

TYPE 2 LARGE LATERAL FORCING STRUCTURE
LIMBER JIM STREAM AND FLOODPLAIN RESTORATION
UNION COUNTY, OREGON
WALLOWA WHITMAN NATIONAL FOREST, LA GRANDE RANGER DISTRICT

File Name: Limber Jim.DWG
Drawing No. SHEET 10
Sheet 12 of X

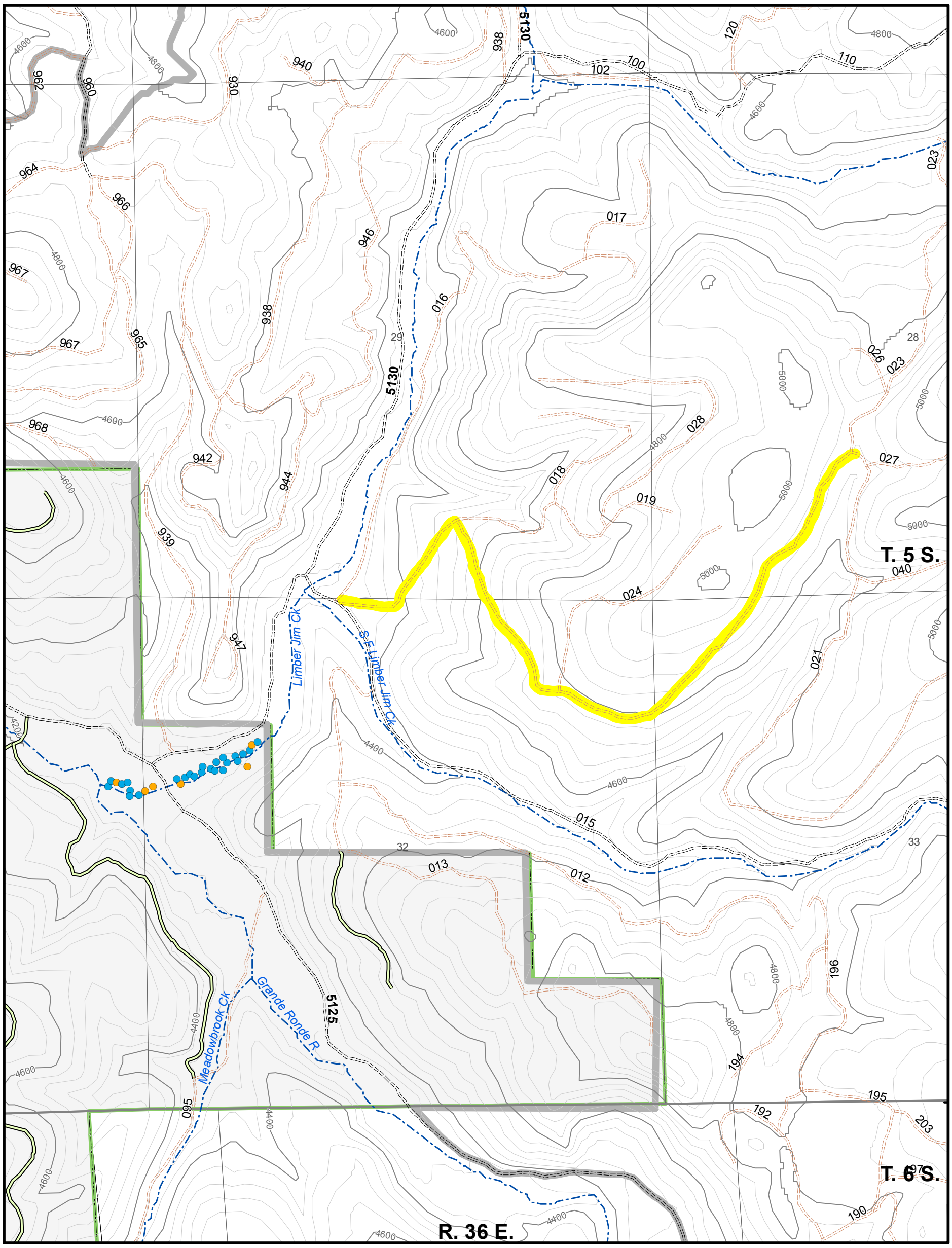
Design on Lower Limber Jim Creek (.6 miles)

- Target floodplain inundation, & side channel activation areas
- 24: Type I debris jams sites: Full channel jam construction
- 5: Type II habitat structures
- 73 whole trees
- 100 pieces of Floodplain wood
- 2 - 4: 10 yard loads of racking material per site.
- Seeding and mulching

Lower Limber Jim Creek Project Budget

- **BUDGET**
  - Log loader: $14,700
  - Excavator: $16,500
  - Salary: $ 7,500
  - Tree removal/stage contract $45,000
  - Tree Purchase (100 trees) $10,000
  - Overhead (10%) $ 9,370

- **Total** **$103,070**



Date: 10/9/2019

LOWER LIMBER JIM Restoration Project

1 : 12,000

0 0.15 0.3 0.45 0.6 Miles

40 Foot Contour Interval

Project Point Locations
- Habitat Structure
- Full SPanning Log Jam Structure

Tree Removal Adjacent to Road

Limber Jim Boundary

Existing Roads; OPML
- 1 - BASIC CUSTODIAL CARE (CLOSED)
- 2 - HIGH CLEARANCE VEHICLES
- 3 - SUITABLE FOR PASSENGER CARS
- 4 - MODERATE DEGREE OF USER COMFORT
- 5 - HIGH DEGREE OF USER COMFORT
- Other Non USFS Roads

Main Streams

District Boundary

Ownership
- Private Land
- U.S. Forest Service
- Undetermined

Author: MSutton
Path: T:\FS\NFS\WallowaWhitman\Project\lagLimberJim2012\GIS\Workspace\MEL\JPlatz_Map_02_2014.mxd