REQUEST FOR PROPOSALS
GEOMORPHIC DESIGN SERVICES
Yakama Nation Fisheries Program -
Low-Tech Process-Based Restoration

Response Deadline: October 5 2020, 5:00 pm

YAKAMA NATION

Yakama Nation Fisheries - Klickitat Field Office
P.O. Box 215, Klickitat, WA 98628
Phone: 509-830-0034 | E-mail: dlindley@ykfp.org

Anticipated Timeline

Proposal Submission Deadline:	October 5, 2020 – 5:00pm
Tentative Award Selection:	October 7, 2020
Project Initiation (estimate):	October 26, 2020
Site Visits	November 2020
Draft Designs and Work Products	January 2021
Final Deliverables	March 31, 2021

Please send questions in writing so responses can be shared with other interested parties.

REQUEST for PROPOSALS for DESIGN SERVICES

I - PROJECT OVERVIEW

The **YAKAMA NATION (YN)** Klickitat Watershed Enhancement Project (KWEP) is soliciting a Request for Proposals for Design Services for Low-Tech Process-Based Restoration (LTPBR) projects in the Klickitat Subbasin, south central Washington State.

KWEP works to restore, enhance and protect watershed function within the Klickitat subbasin. Work emphasizes restoration and protection of Endangered Species Act (ESA) -listed anadromous fish. Restoration activities focus on improving stream processes by resolving watershed constraints and improving habitat conditions and water quality factors in support of species recovery. Restoration actions implemented since 1997 have focused on addressing fish passage barriers, meadows restoration, floodplain reconnection, wood enrichment, and side channel reconnection. Tens of projects have been completed to-date, primarily involving significant design, earthwork, and construction costs. Despite twenty-plus years of focused watershed restoration work, degradation and physical process interruption continue to limit salmon productivity and prevent species recovery. Thus, KWEP is exploring the LTPBR approach to reduce individual project costs while increasing the spatial scope and influence of projects.

Low-Tech Process-Based Restoration is a practice of using simple, low unit-cost, structural additions (i.e. wood and beaver dams) to riverscapes to mimic functions and initiate specific processes (http://lowtechpbr.restoration.usu.edu/#). Hallmarks of this approach include:

- An explicit focus on the processes that a low-tech restoration invention is meant to promote
- A conscious effort to use cost-effective, low-tech treatments (e.g. hand-built, natural materials, non-engineered, short term, design life spans) because of the need to efficiently scale up application
- 'Letting the system do the work' which defers critical decision making to riverscapes and nature's ecosystem engineers

Figure 1. Theoretical model of structurally-focused process approach.

KWEP and YN staff have been focused on beaver mimicry and beaver restoration approaches for several years and have been laying the groundwork to support this work. Notable progress relevant to this proposal includes:

- Conducted comprehensive inventory of meadows on the Yakama Reservation
- Contracted Utah State University to conduct Beaver Restoration Assessment Tool (BRAT) modeling
- Multiple staff attended LTPBR workshops (in-person and virtual)
- Awarded (2020) Landscape Conservation Catalyst Fund to assist with capacity-building for the Wishpush Working Group (YN, Mt. Adams Resource Stewards, Mid-Columbia Fisheries Enhancement Group (MCFEG) and friends)
- Partner (MCFEG) awarded (2020) Salmon Recovery Funding Board Grant for beaver restoration activities in Mid-Columbia region
- Assembled/constructed beaver holding facility at YN Klickitat Field Office (Klickitat, WA)
- Multiple staff attended WDFW Beaver relocator training; contemplating certification process
- Collaboration with Heritage University and YN Tribal School to involve students in the study of wildlife/habitat interactions with a focus on beavers

Generally speaking, the primary factor limiting salmonid productivity in the Klickitat subbasin is over-summer survival due to lack of perennial habitat. The second, closely related to the first, is the quantity and quality of juvenile rearing habitat. Given the current conditions and climate change projections such as those conducted by the University of Washington for Tribal lands (Fig. 2), these problems are expected to be exacerbated over the coming years. The UW model output below suggests a 42% decrease in summer streamflow for the upper Klickitat River by the end of the 21st century.

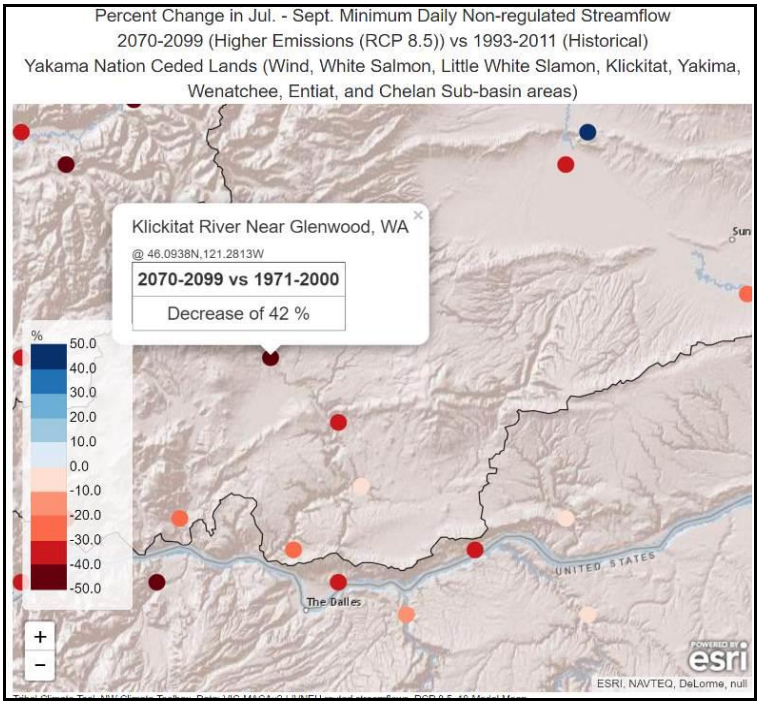

Figure 2. Projected change in July-September streamflow for the Upper Klickitat River 2070-2099.

In an attempt to address current conditions and buffer against future scenarios, the LTPBR approach is to be employed in the Klickitat watershed in order to increase system resilience through species abundance, species diversity, riparian expansion, increased temporary water storage, and flood attenuation. The sites identified in Figures 3-12 represent a subset of suitable sites developed via professional judgment, watershed assessments, meadow inventories, and BRAT modeling. These 11 sites represent high-priority sites for either primary salmonid usage and/or watershed position, where restoration would aid reaches downstream. These sites have low stream/valley gradient, relatively wide alluvial valleys, and limited infrastructure. Anecdotal observations of these sites and other sites in the Klickitat subbasin suggest that a multi-prong approach to restoration will be necessary including structural elements, revegetation, grazing management, and beaver reintroduction.

While not all eleven sites may be advanced due to time and budget constraints, the intent is to advance a subset of sites through the BPA HIP III design review process and craft KWEP workflows for design, budgeting (crew and materials) and logistics (production rates, sequencing, hardware/equipment).

The sites are listed below and presented in Figures 3-12.

1. McCormick Meadow - 46.422491, -121.289346
2. Caldwell Prairie - 46.412004, -121.231056
3. Diamond Fork 1 - 46.463659, -121.195596
4. Diamond Fork 2 - 46.476573, -121.226177
5. Tepee Creek - 46.136704, -121.067258
6. White Creek - 46.143892, -121.073336
7. Summit Creek - 46.044276, -121.965708
8. Brush Creek 1 - 46.103513, -121.029695
9. Brush Creek 2 - 46.124630, -121.004854
10. Little Klickitat River – no maps located on private land; will be pursued as funding and time allow; primarily field reconnaissance
11. Swale Creek – no maps located on private land; will be pursued as funding and time allow; primarily field reconnaissance

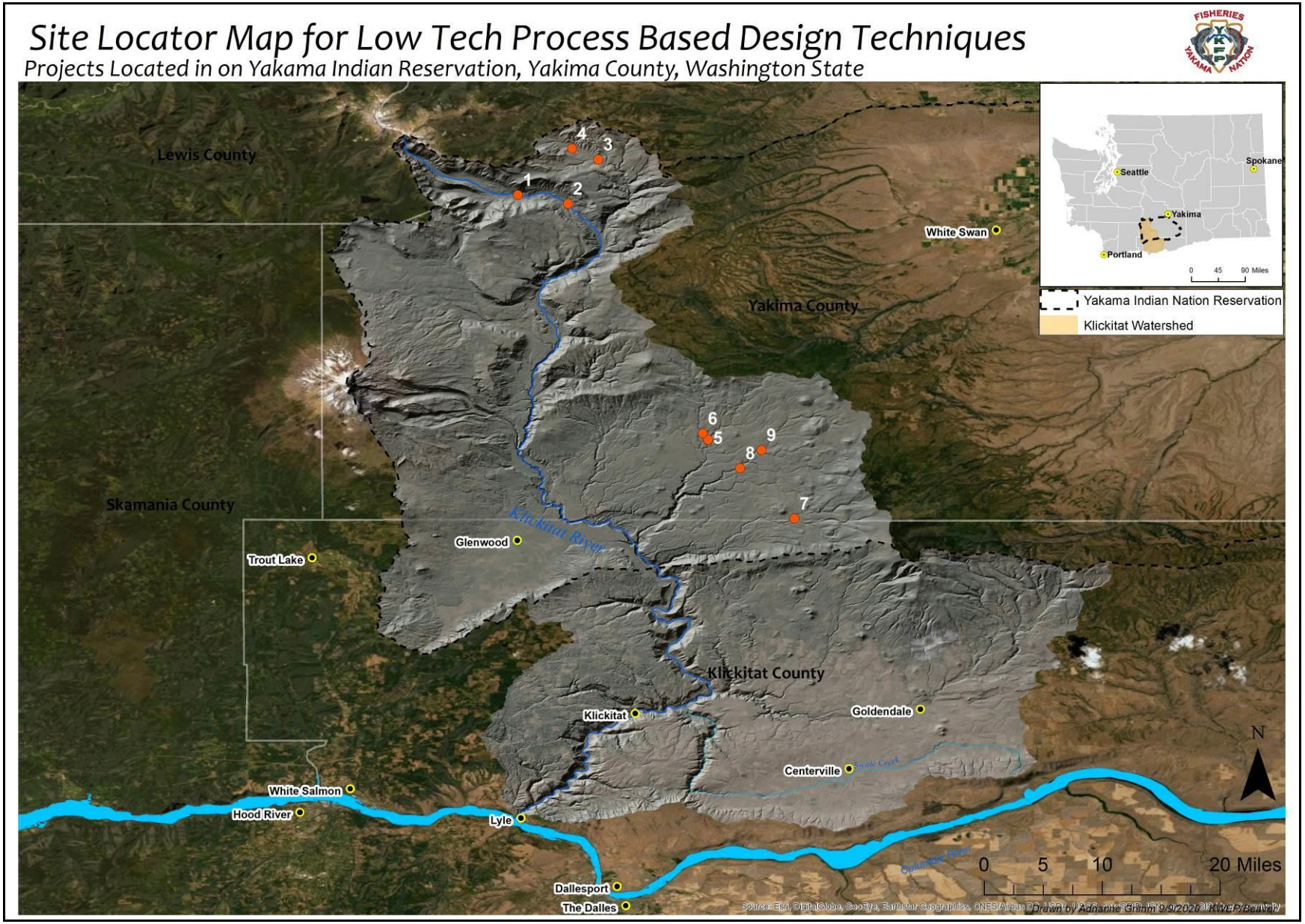

Figure 3. Site locator map for LTPBR sites in Klickitat subbasin.

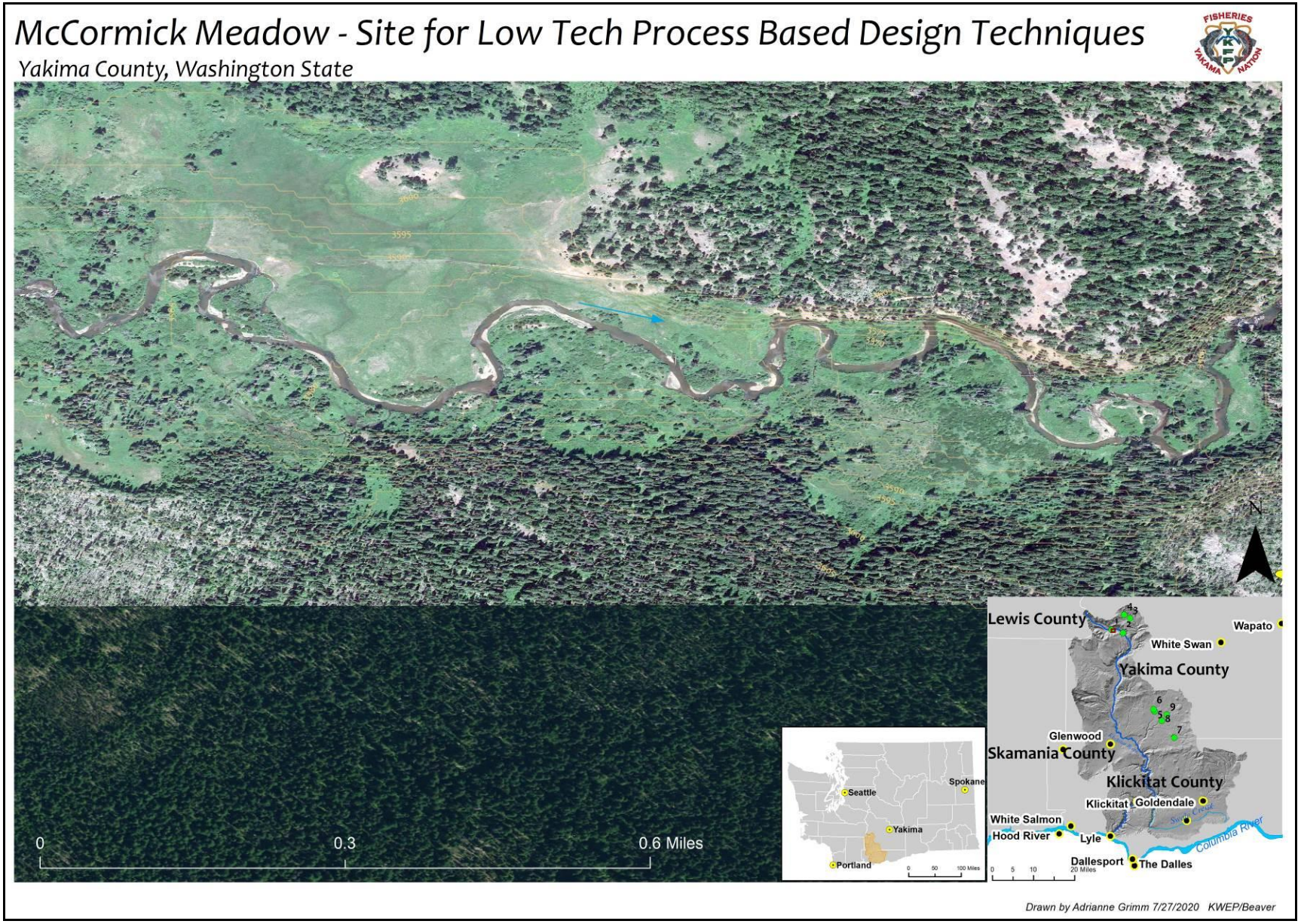

Figure 4. Site 1 - McCormick Meadow Area Map.

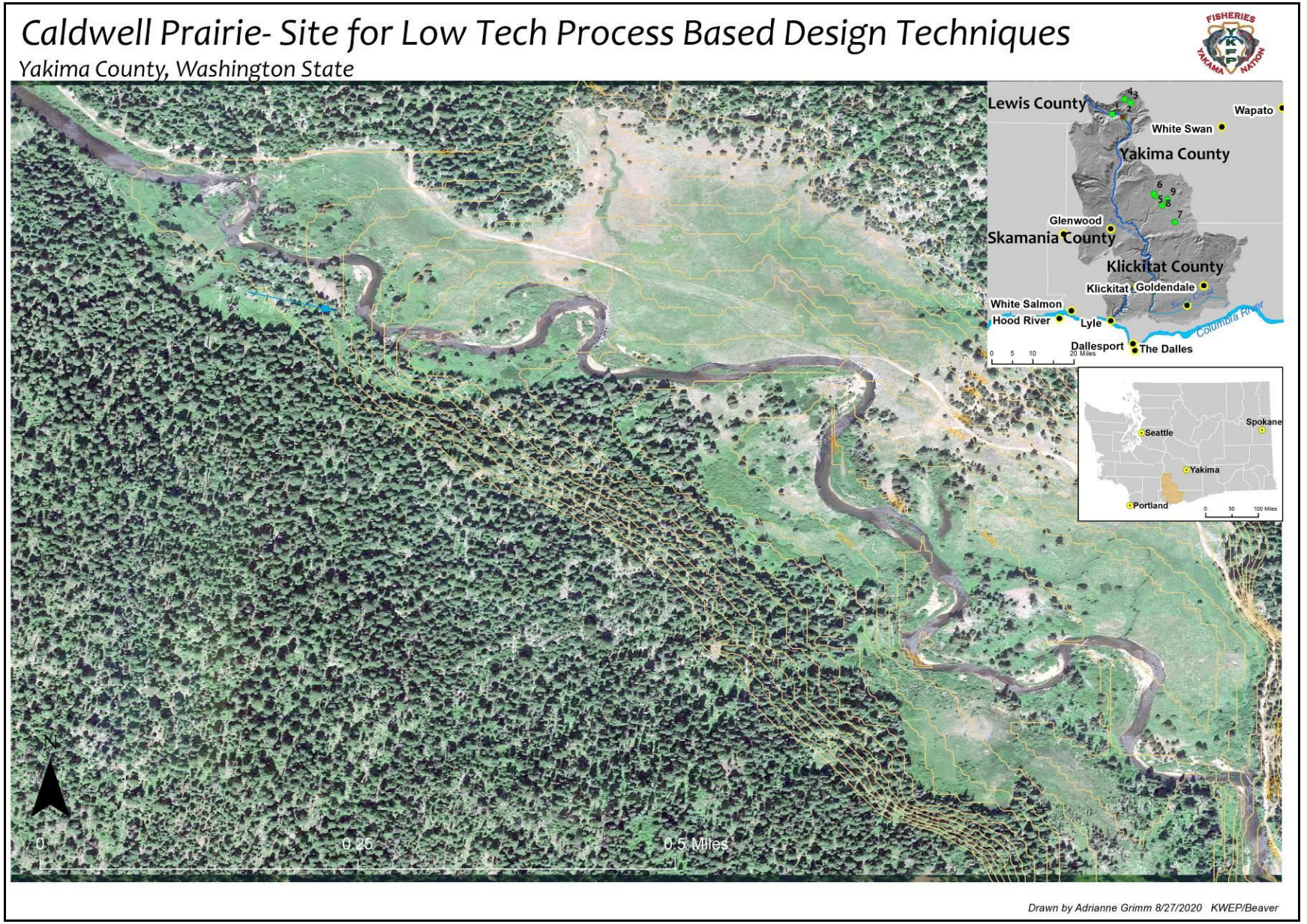

Figure 5. Site 2 - Caldwell Prairie Area Map.

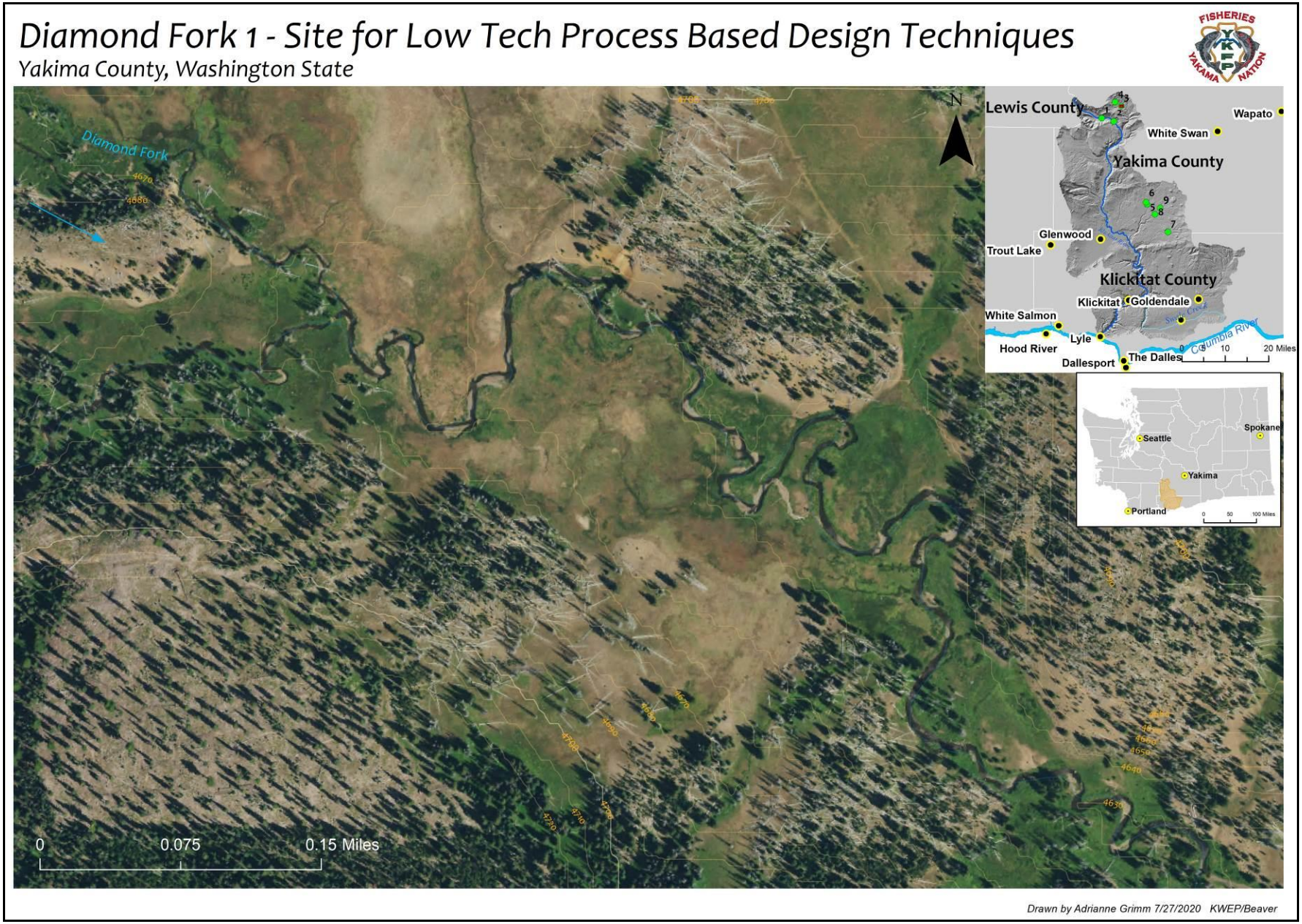

Figure 6. Site 3 - Diamond Fork 1 Area Map.

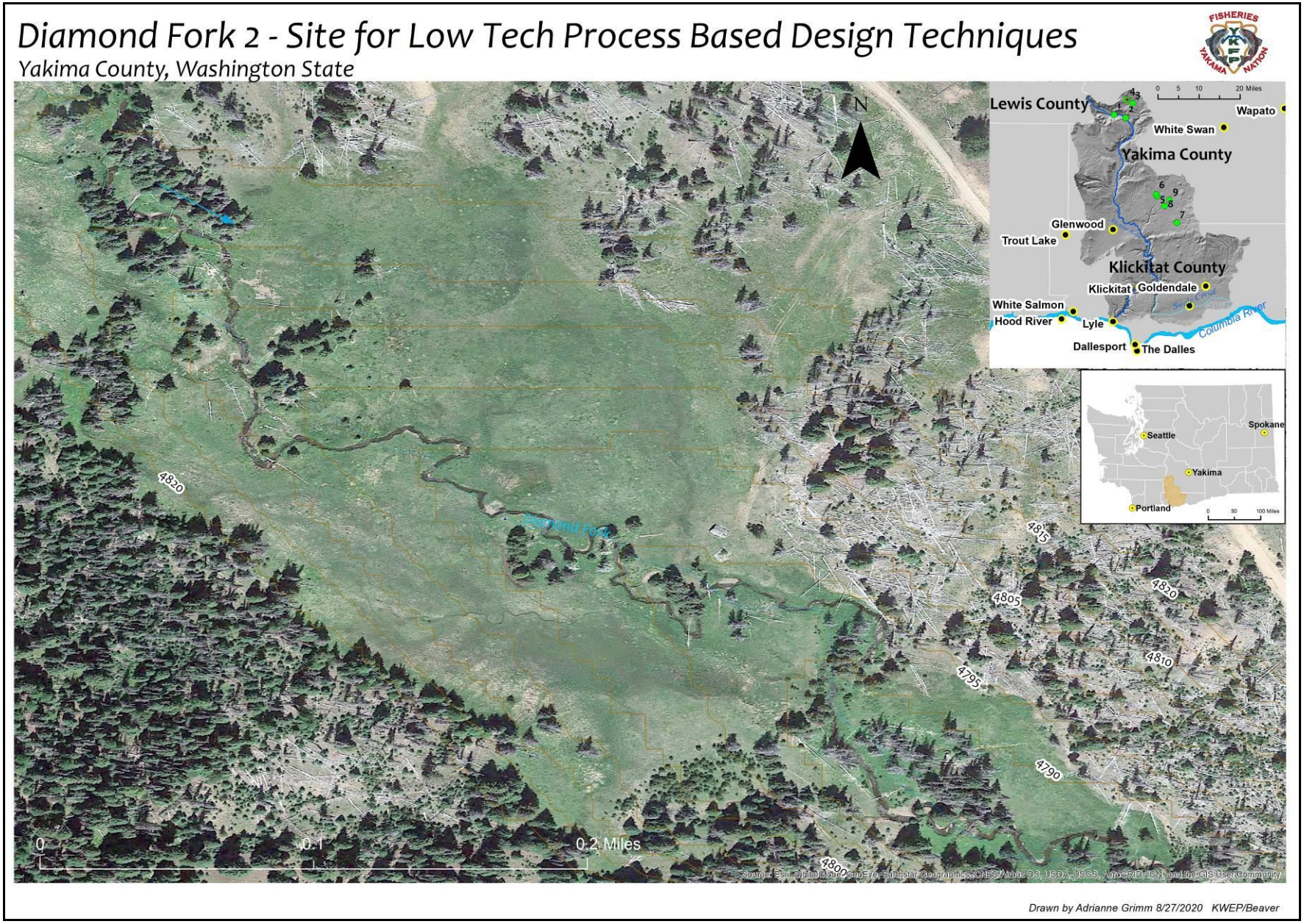

Figure 7. Site 4 - Diamond Fork 2 Area Map.

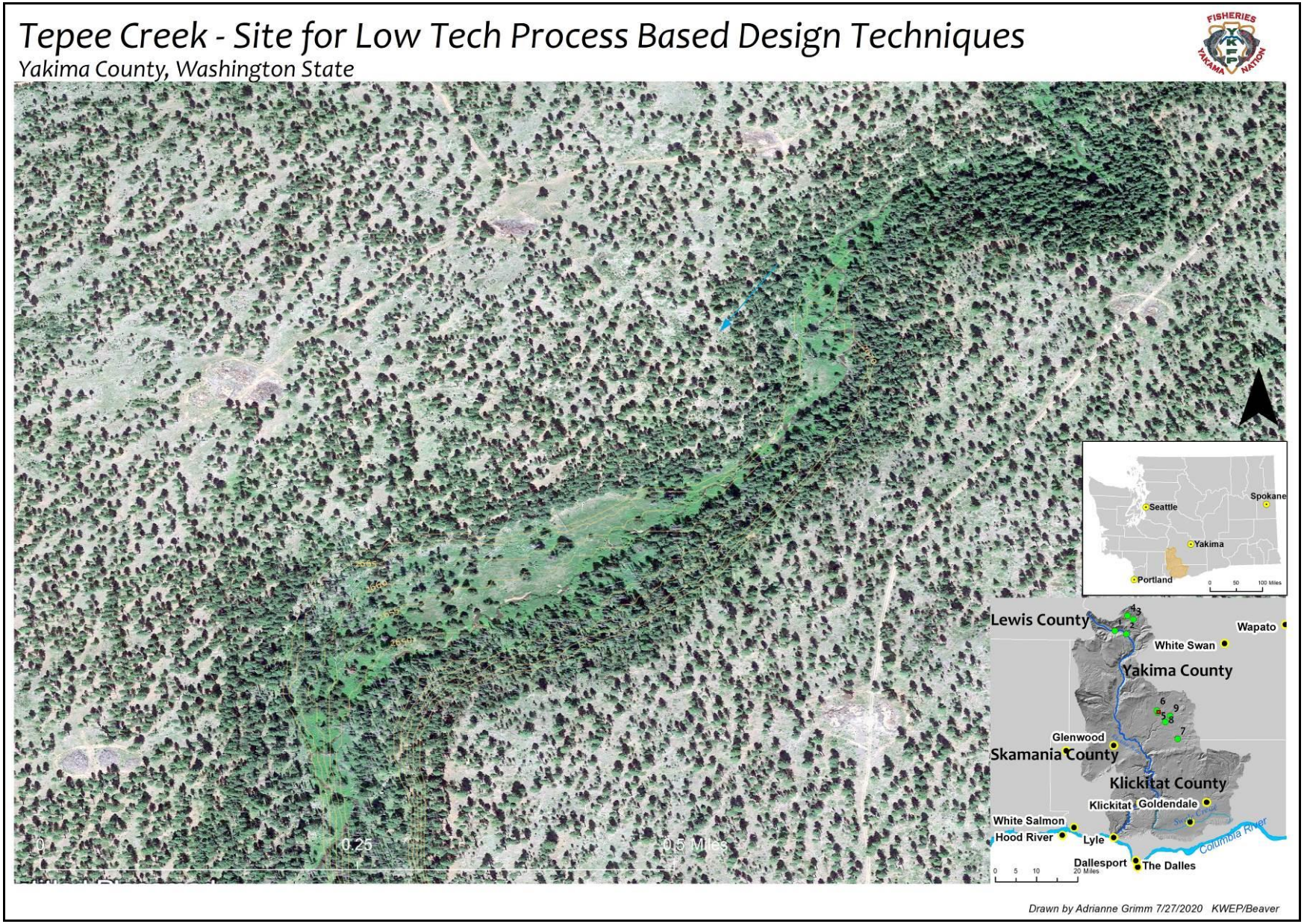

Figure 8. Site 5 - Tepee Creek Area Map.

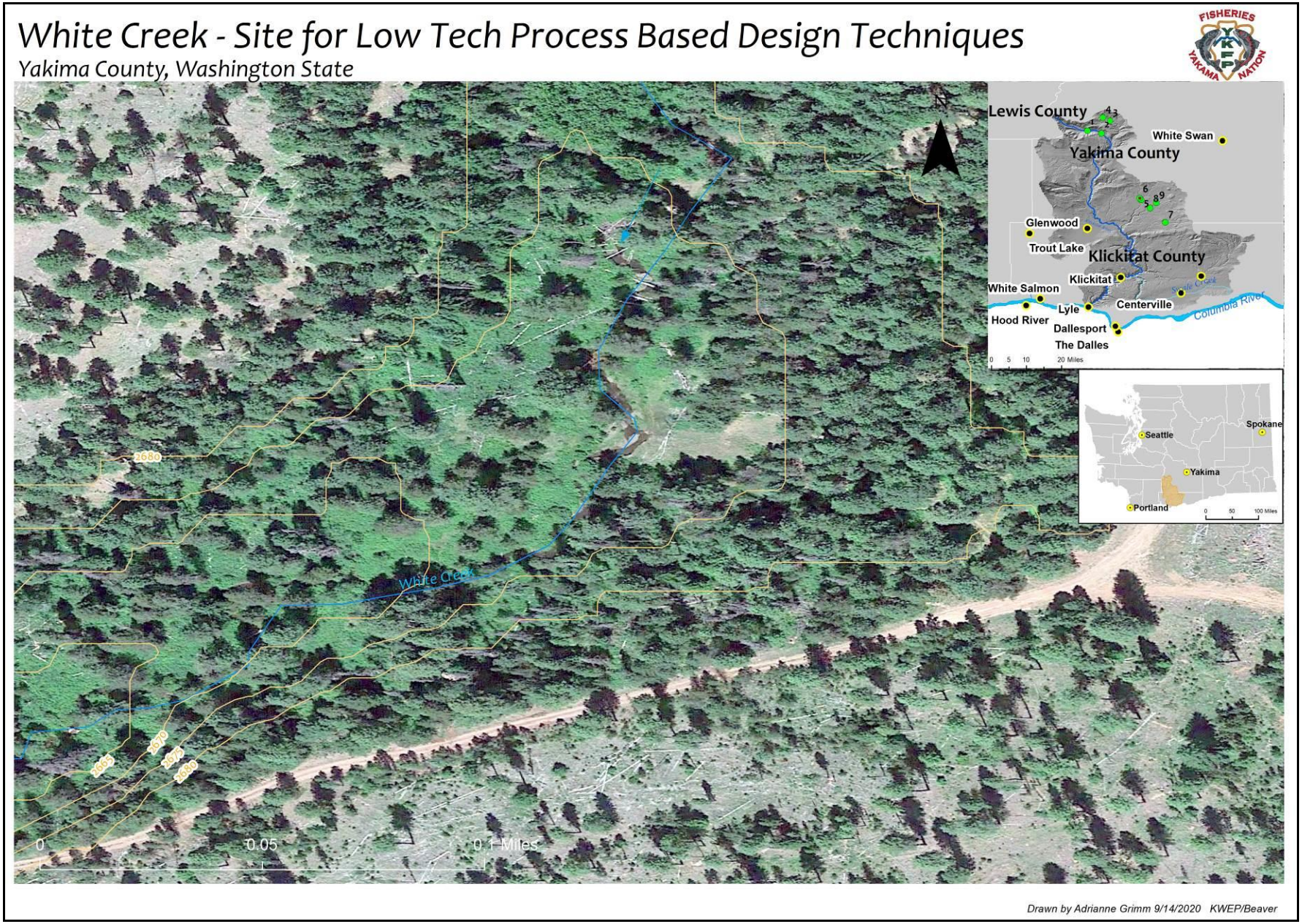

Figure 9. Site 6 - White Creek area map.

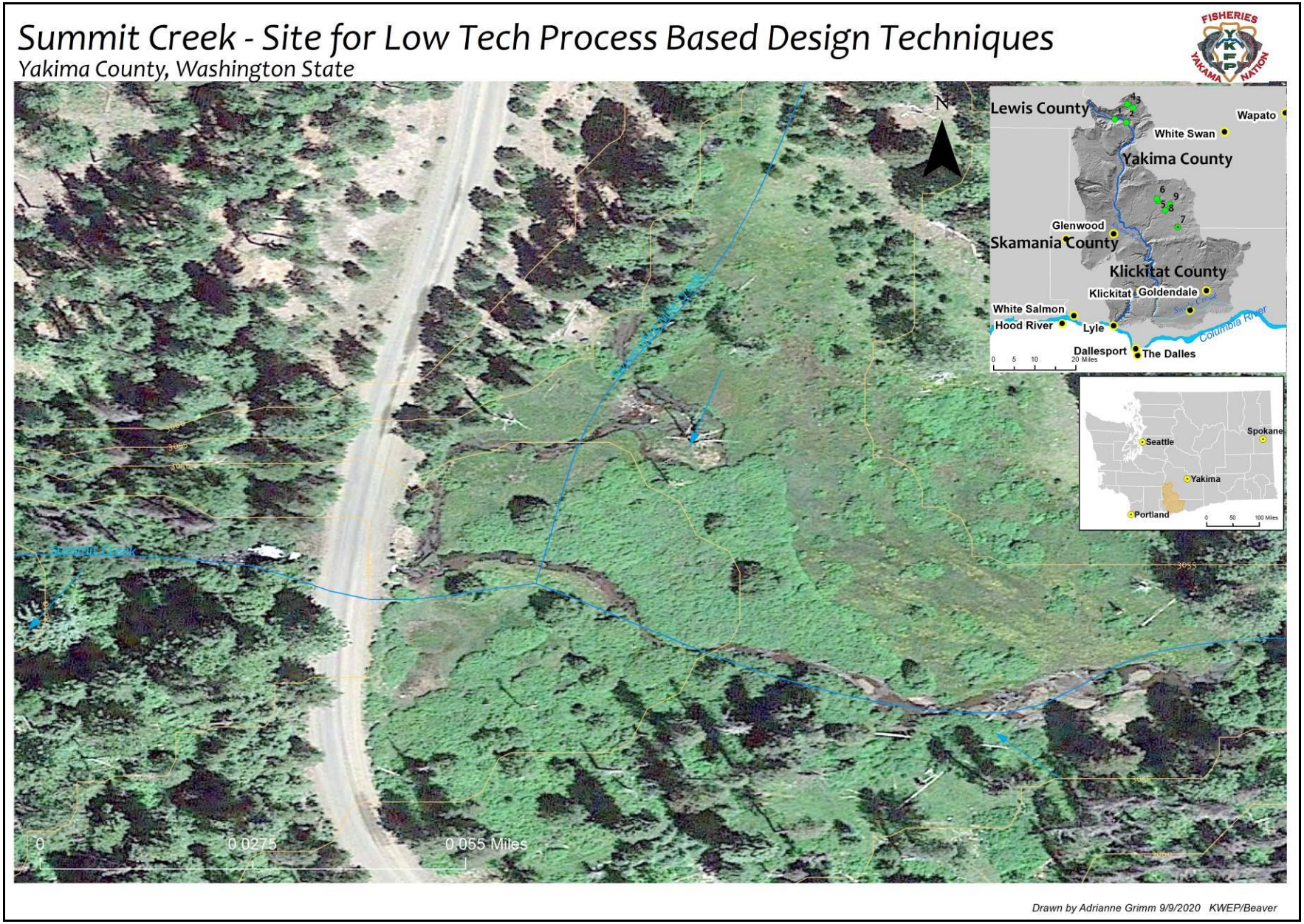

Figure 10. Site 7 - Summit Creek Area Map.

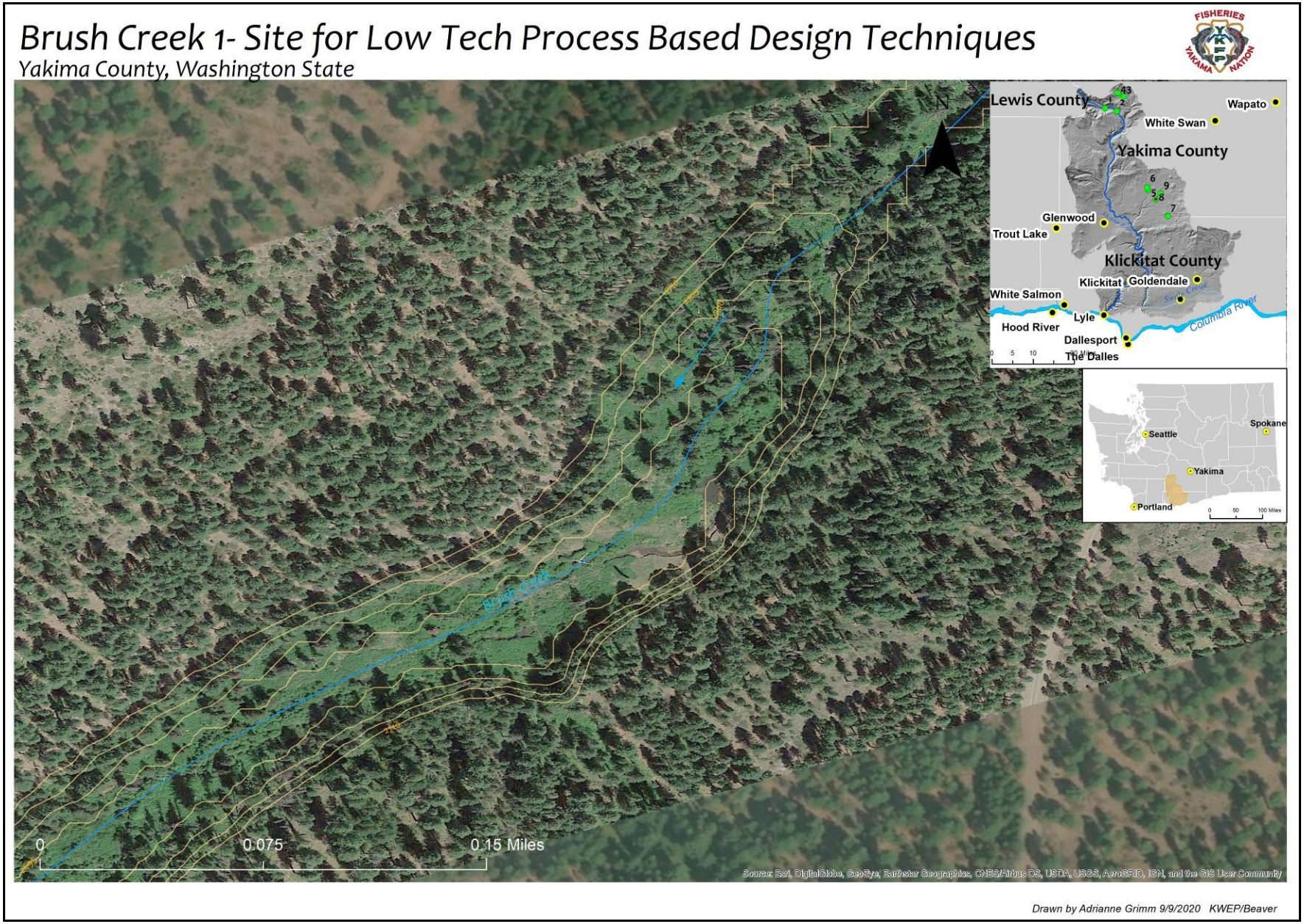

Figure 11. Site 8 - Brush Creek 1 Area Map.

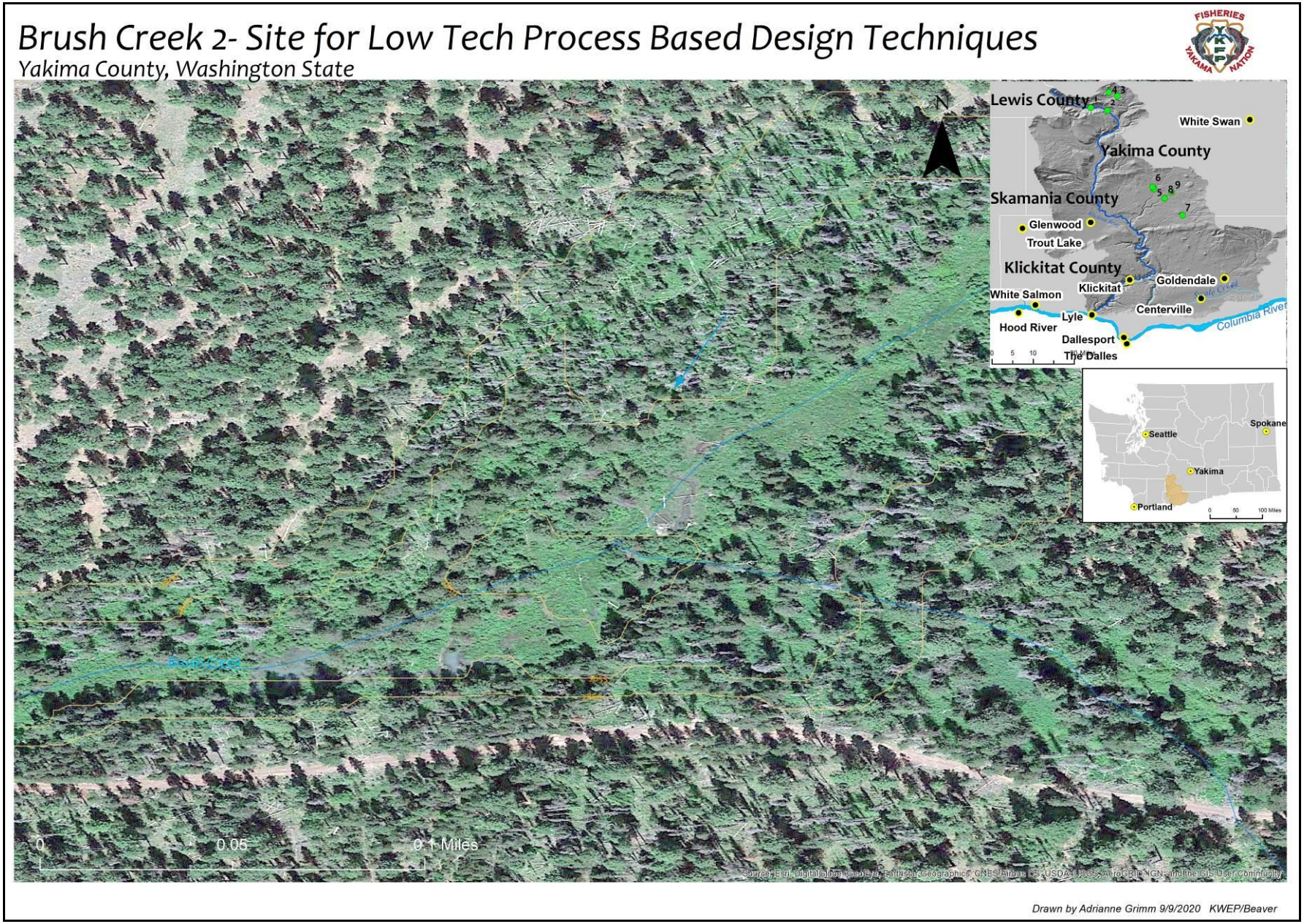

Figure 12. Site 9 - Brush Creek 2 Area Map.

II - OBJECTIVE

The objective is to obtain HIP III design submittals for Low-Tech Process-Based Restoration Projects and to develop procedures for future YN-sponsored LTPBR projects in the Klickitat River subbasin. The selected firm will demonstrate experience with LTPBR principles and project implementation, familiarity with Bonneville Power Administration's HIP Design submittals, and examples of practical approaches to watershed scale degradation.

Proposal should include the consulting engineering firm's:

- Consultant Team Structure
- Team/Personnel Qualifications and Experience
- Project Approach
- Past Performances/References
- Fee Schedule – Personnel Hourly Rates and Estimated Overall Project Cost

III – SCOPE OF WORK

The cost estimate should reflect the following design components:

A. Site Reconnaissance
    a. Field observations (as applicable)
    b. Geomorphic Assessment
    c. Base Mapping
B. Hydrology & Hydraulics
    a. Hydrology
C. BPA HIP III Design Submittals
    a. Brief Design Report
        i. Periodicity of species present
        ii. Describe limiting factors and degraded condition
        iii. Project objectives
        iv. Matrix with triggers for adaptive management
    b. Planview Drawings
        i. Label channel structures with unique symbols
    c. Typical Cross Section Drawings with Construction Notes
        i. Typical post depth, max height of posts above low-water surface elevation
    d. Draft Cost Estimates by Project Site
D. Assistance with response to initial HIP III Feedback
E. Assistance with development of YN workflows for these type of projects (standard structure symbols for visuals, typical cross-section drawings, crew sizing (production rates), materials, etc.)

Yakama Nation will provide:

- Personnel to support site reconnaissance survey
- Project Management and Coordination
- Aerial photography
- LiDAR data as available
- Beaver Restoration Assessment Tool (BRAT) outputs for sites

IV – TIMING AND DURATION

We expect to award this contract in October 2020 and receive final deliverables by March 31, 2021. Qualified Contractor Proposals shall be received via email no later than 5:00 P.M. Pacific Daylight Time on October 5, 2020. Bids may be emailed to: David Lindley at dlindley@ykfp.org.

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V – MINIMUM QUALIFICATIONS

PROPOSAL SUBMITTAL CONTENT

To be considered responsive to this RFP, the Proposal shall include all items identified in Section II by the deadline specified in Section IV.

PROPOSAL COVER AND COVER LETTER

Clearly label the Proposal cover and the subject line in the cover letter with "PROPOSAL for Yakama Nation Low-Tech Process-Based Restoration." The cover letter shall be limited to one page and shall identify the consultant name and contact person, their title, mailing address, email address, phone number, and the name of the proposed project manager.

CONSULTANT TEAM STRUCTURE

Provide the team structure, identifying any sub-consultants, including names of lead persons with titles and general project responsibilities, and the physical location of each lead person.

TEAM/PERSONNEL QUALIFICATIONS AND EXPERIENCE

The Proposal will be evaluated for the team's and individual team member's qualifications, general background, and experience in relation to the stated Scope of Work.

PROJECT APPROACH

The Proposal will be evaluated based on the proposed approach and past experience with LTPBR projects.

PAST PERFORMANCES/REFERENCES

References may be used to verify the accuracy of information provided in the Proposal. Provide three recent references who can be contacted concerning your firm's/team's RFP. In listing the references, include the name of the client, telephone number, e-mail address, contact person, and the specific work your firm did for the client. Also provide three recent references who may be contacted concerning the performance of your firm's/team's proposed project manager(s). The Yakama Nation reserves the right to contact references other than those submitted by the respondent.

FEE SCHEDULE

The Proposal will be evaluated on the costs associated with the design work. Please include:

A. Hourly rate-by-position classification and estimated hours per task
B. Charges for equipment, printing, or other costs
C. Direct expenses (if applicable)

VI - SELECTION PROCESS & EVALUATION CRITERIA

Each contractor shall provide references and/or other information related to their proposal that demonstrates their past performance. The owner (Yakama Nation) shall evaluate the qualifications of bidders. The owner shall have the sole discretion and responsibility for choosing the responsive and responsible contractor.

Bids will be evaluated based on the following ranking criteria:

A. Fee Schedule
B. Relevant Firm Experience
C. Project Approach
D. Qualification of Assigned Staff
E. References