

QUINAULT INDIAN NATION



Case Study – Quality Assurance Project Plans for Tribes

Janice Martin, QIN Wetlands Specialist



WHAT THE QAPP?



Your Project

- Program Goals
- Problem - Solution

Your QAPP

- Resources

Valuable Lessons

- Planning Ahead

What is your project?

- Are you trying to solve a problem?
- Specify your Question
- Is there an existing standard or regulation ?
- What research have others done on this topic and what equipment have they used successfully?
- What will your organization/ tribe do with the results?



Your QAPP

- EPA Tribal Coordinator
- Existing Protocols
- Local Expert Knowledge
- Uncertainties Identified





Existing Resources

- EPA templates
- Required Elements
- <https://www.epa.gov/r10-tribal/quality-assurance-project-plans-tribes-region-10#required-elements>

EPA Templates

Templates

EPA has several templates tribes can use to start their QAPP. Many training providers also provide topic-specific templates or tools. EPA's Quality Assurance Manager and subject matter experts can advise you on which template to use for your project.

EPA templates include:

- [Quality Assurance Project Plan Development Tool](#): This tool contains information to help grantees develop a QAPP for projects that involve surface or groundwater monitoring and/or the collection and analysis of water samples. The tool takes you, step by step, through the thought process of planning a project and provides a framework for documenting your plan.
- [Quality Assurance Handbook and Guidance Documents for Citizen Science Projects](#): A [citizen science](#) project typically involves the local community and volunteers to collect data. Often, a citizen science template can be used for a less complex project that does not need to meet a regulatory standard.
- [EPA Region 10 Tribal QAPP Guidance and Template \(docx\)](#) (124.08 KB) This template from EPA Region 10 includes sample text for a water monitoring project, but can be adapted for any topic.

In addition, the Institute for Tribal Environmental Professionals (ITEP) offers [Turbo-QAPP](#), an online program similar to Turbo-Tax™ that allows tribes to write QAPPs interactively.



Required Elements



Required Elements

Each QAPP must include all 24 elements listed below. **Your QAPP will be returned if it does not address each element.** However, not all elements are relevant to all projects. If a question does not apply to the project you are designing, simply note that and move on to the next element.

Group A: Project Management

1. Title & Approval Sheet
2. Table of Contents
3. Distribution List
4. Project/Task Organization
5. Problem Definition & Background
6. Project/Task Description
7. Quality Objectives & Criteria
8. Training
9. Documentation & Records

Group B: Data Generation & Acquisition

10. Network Description
11. Sampling Methods
12. Sample Handling & Custody
13. Analytical Methods
14. Quality Control

15. Instrument/Equipment Testing, Inspection & Maintenance
16. Instrument/Equipment Calibration & Frequency
17. Inspection/Acceptance of Supplies & Consumables
18. Non-Direct Measurements
19. Data Management

Group C: Assessment & Oversight

20. Assessment & Response Actions
21. Reports to Management

Group D: Data Validation & Usability Elements

22. Data Review, Verification & Validation
23. Verification & Validation Methods
24. Reconciliation with User Requirement

Wetland Field Verification Study QAPP

- Randomized sampling locations
- USACOE Wetland Determination forms
- WSDOE Western Washington Rating Forms
 - (Attached as appendices)
- Geotagged Photos of soil pits and soil profiles
- Geotagged Photos in all four cardinal directions
- EPA four Core Elements - Monitoring & Assessment



eDNA water sampling Study



- Partnered with NWIFC
- Obtained training from NWIFC
- Used already approved sampling
- Contacted their field labs for the labs QA/QC procedures and
(Attached as appendices)

Valuable Lessons

| C | D | E | F | G |
|-------------------------------|-------|---------------|------------|--|
| Longitude | Name | Watershed | Date | To_revisit |
| '72" W 47° 25' 04.29122798" N | LQ04A | Quinault | 2023-08-24 | In the Zone, Map 7 |
| '83" W 47° 25' 04.81093590" N | LQ04B | Quinsult | 2023-08-24 | In the Zone, Map 7 |
| '02" W 47° 24' 51.48148894" N | LQ13A | Quinault | 2023-08-24 | Floatyboat, Andrew F1701 |
| '43" W 47° 24' 46.21728550" N | LQ13B | Quinault | 2023-08-24 | Floatyboat, Andrew F1701 |
| '94" W 47° 24' 52.13403848" N | LQ13C | Quinault | 2023-08-24 | Floatyboat, Andrew F1701 |
| '67" W 47° 25' 44.36898679" N | LQ09B | Quinault | 2023-08-24 | Andrew site FCRD1, unnamed H stream connected to Prairie Creek |
| '85" W 47° 25' 45.27328095" N | LQ01B | Quinault | 2023-08-24 | N Elkhorn - Lone Mountain Road |
| '78" W 47° 25' 50.57137365" N | LQ01C | Quinault | 2023-08-24 | N Elkhorn - Lone Mountain Road |
| '98" W 47° 28' 45.12994231" N | LQ14 | Quinault | | Have not tried |
| '51" W 47° 17' 42.33157946" N | MW08 | Moclips/Wreck | | Lawnmower lusu (after rains) |
| '18" W 47° 18' 05.31875379" N | LQ12B | | | 9/15 - no water |
| '08" W 47° 17' 45.92214133" N | MW09 | | | 9/15 - sample here |
| '98" W 47° 21' 44.80372191" N | LQ15 | Quinault | | Roads map E-3 off Moclips highwa MP10 gravel pit |
| | | | | 9/15 water to sample - on map in phone with photo |

- Available Studies and Literature
- Local Expert Knowledge
- Uncertainties Identified

Valuable Lessons

- Use existing resources
- Plan AHEAD
- Start NOW
- Approval process.
- How will you manage the data?



Questions?

Janice Martin
QIN Wetland Specialist (PWS 1653)
Janice.Martin@Quinault.org
360-276-8215 (7342)

