# National Fish and Wildlife Foundation
## Final Programmatic Report

**Project Name and Number:** Agricultural Chemical Removal from Critical Watersheds (OR) (2006-0123-005)

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### 1) Summary

The purpose of the Agricultural Chemical Removal Project was to remove pesticides and other chemicals from the McKenzie and Middle Fork Willamette Watersheds in order to protect a critical drinking and groundwater resource. The project was designed to allow growers in these watersheds to dispose of old pesticides, fertilizers, waste oil, and other chemicals at no cost or risk to themselves. Grant funds were available to assist growers with identifying unknown chemicals and repacking containers to ensure that they would be safe for transport to the collection site. In addition to protecting domestic wells and drinking water sources, removing these types of chemicals also serves to protect people, pets, livestock, and wildlife from accidental exposure. The project collected approximately 44 tons of pesticides and other chemicals over 10 collection days and was the result of a partnership between the Eugene Water & Electric Board (EWEB), Springfield Utility Board (SUB), Lane County Public Works Waste Management Division, Oregon State University (OSU) Extension, the Oregon Department of Environmental Quality (DEQ), and the Oregon Department of Human Services Drinking Water Program.

### 2) Introduction

This agricultural chemical removal project was initiated to help growers remove and properly dispose of old agricultural chemicals that might still exist in barns and sheds in the McKenzie and Middle Fork Willamette Watersheds. These legacy pesticides have the potential to affect surface water and groundwater resources in the region. A number of pesticides such as DDT were banned for use years ago due to their bioaccumulative effects, high toxicity and persistence in the environment. A recent example of persistence involved DDT that was detected in reservoir sediment and forest soils associated with a Cougar Dam retrofit project. The DDT was a residual product from aerial spraying in the late 1950s to battle a spruce budworm infestation.

A recent survey of over 700 growers in the Upper Willamette Basin conducted by OSU Extension found that thousands of gallons of obsolete agricultural chemicals remained on farms. Over 1,500 pounds of DDT were found in dilapidated containers at one farm. Some reasons for continued presence of these chemicals may be: high disposal cost ($5-8/gallon), lack of

knowledge about how to dispose of these banned chemicals, and the fact that growers are not allowed to participate in household hazardous waste collection events.

The McKenzie River is the sole source of drinking water for over 200,000 people in the Eugene area and the Middle Fork Willamette River provides drinking water to nearly 60,000 people in the Springfield area. The Eugene Water & Electric Board (EWEB) and Springfield Utility Board (SUB) have Drinking Water Source Protection Plans approved by the Oregon Department of Environmental Quality (DEQ) that list pesticides as a major threat to drinking water supplies.

Both watersheds provide habitat for Endangered Species Act (ESA) listed fish, with the McKenzie River having one of the last populations of native bull trout in the Northwest. Risk from old agricultural chemicals near these critical resources needs to be assessed before the next major flood or accidental release.

The intent of the agriculture chemical collection project was to reduce a significant threat to Eugene/Springfield area drinking water resources and endangered aquatic life from obsolete farm chemicals that are illegal to use and have no reason to remain in the watersheds. This project also enhanced and strengthened existing outreach efforts to the agricultural community related to reduced chemical use.

**Objectives:**
The objectives of the agricultural chemical collection project were to:

1. Assess the magnitude of risk to drinking water supplies from obsolete agricultural chemicals;

2. Educate growers on proper chemical storage and use to reduce exposure to family, pets and farm animals, and protect domestic wells and waterways.

3. Remove obstacles that prevent growers from participating in the disposal of old chemicals;

4. Make the process of chemical identification and removal as easy as possible for growers;

5. Use existing partnerships to efficiently and effectively assess, remove, and dispose of agricultural chemicals;

6. Document process, quantities and types of chemicals disposed, costs, lessons learned, and recommendations for improvement to assist in the implementation of similar projects in other parts of the state; and,

7. Remove a significant risk from obsolete agricultural chemicals in the McKenzie and Middle Fork Willamette watersheds to protect both drinking water resources for Oregon's second largest population center and critical ESA fish habitat.

## 3) Methods

The Eugene Water & Electric Board (EWEB) used $40,220 from the Oregon Governor's Fund for the Environment along with $5,840 of DEQ Section 319 grant funds (plus $3,983 in match) and $65,150 in matching funds or in-kind services to implement the agricultural chemical removal project. EWEB partnered with several other local agencies to execute this project, including the Springfield Utility Board (SUB), Lane County Public Works Waste Management Division, OSU Extension Service, Oregon DEQ, Oregon Department of Human Services (Drinking Water Program), McKenzie Fire and Rescue, and Eugene Fire (HazMat Team).

The project team conducted the following steps/tasks to accomplish this project:

1. *Conducted extensive farm surveys and outreach to inform growers of the project and encourage participation.* EWEB and SUB created a database of growers in their respective watersheds to generate mailings and track responses and survey results. Correspondence sent to growers included:
   - Initial postcard describing the project and alerting growers that more information would be forthcoming;
   - Cover letter describing the project in more detail and listing the steps required to participate, along with the actual farm chemical survey to complete;
   - Two reminder postcards reiterating collection dates and encouraging growers to participate; and,
   - Appointment postcards reminding growers of their scheduled appointment times and providing directions to the collection facility.

   One public meeting in each watershed was held to answer any questions about the project and assist growers in filling out forms. The farm chemical survey was also posted on EWEB's website so that growers could download the survey if they had internet access.

2. *Conducted farm visits (when requested) to assist growers with chemical identification and/or overpacking of wastes for safe transport to the collection event.* EWEB, SUB and Lane County Waste Management, with some help from McKenzie Fire & Rescue, Eugene Fire Region 2 HazMat, conducted 30 onsite farm visits. Partners assisted growers with chemical identification, overpacked wastes that were in containers unsuitable for safe transport, removed empty rusted drums, loaded containers onto growers' trailers or trucks if needed, and occasionally transported chemicals for the farmer (in special circumstances).

3. *Evaluated farm chemical survey results and developed a collection event plan to document the collection process and logistics of conducting the collection events.* As growers returned farm chemical surveys, this information was entered into an Access database. The amount and type of chemicals listed by growers helped Lane County Waste Management to develop a collection plan for the actual collection event that addressed the logistics of traffic flow, chemical handling and storage procedures, etc. (see Attachment A).

4. *Scheduled dates and times with growers for delivery of chemical wastes at Lane County Waste Management's household hazardous waste facility in Glenwood.* The project team

scheduled time slots for each grower over the five collection events. Time slots ranged from 15-45 minutes, depending on the amount of chemicals growers were planning to bring in for disposal.

5. *Conducted a series of collection events at the Glenwood facility for growers in the McKenzie and Middle Fork Willamette watersheds.* Five collection events were scheduled at Lane County Waste Management's household hazardous waste facility in Glenwood (October 18, 19, 20, 25, and November 1). Lane County Waste Management personnel handled the actual collection logistics, offloading and sorting the chemicals, and providing growers with a summary "receipt" if desired.

6. *Conducted final outreach effort to growers.* After the completion of the collection events, the total amount of chemicals received was calculated. This information was included in a letter sent out to growers thanking them for their participation in the project and describing the impact that this chemical collection will have on the watershed in improving water quality and removing a threat to people, pets, livestock, and wildlife.

In order to carry out this project successfully in a well thought out and coordinated manner, project partners held several planning/coordination meetings to flesh out roles and responsibilities, brainstorm about how to handle event logistics, ensure that all partners were in agreement with the process, and keep activities on schedule. This information was documented in the *Agricultural Chemical Removal Project Implementation Plan*, which was completed early in the project (Attachment B). It was helpful that several of the project partners had worked together previously.

DEQ Section 319 funds were used to compensate Lane County Waste Management for their time assisting with farm visits, writing the chemical collection plan, carrying out the actual collection event, and coordinating disposal of the chemicals collected (waste manifests included as Attachment C). The rest of the project tasks were funded through the Governor's Fund for the Environment and matching funds.

*Second Collection Event*

There were enough funds remaining after the first collection event in the fall to conduct a second event. OSU Extension and Oregon DEQ expressed strong interest in expanding the collection radius to include the Southern Willamette Valley Groundwater Management Area (GWMA). This area was declared a GWMA by DEQ in 2004 due to high nitrate levels detected in shallow groundwater, which serves as a drinking water source for many residents. The area also includes a number of large farmers, several of whom had indicated in the recent OSU farm survey that they had substantial amounts of obsolete chemicals. OSU extension and the Oregon DEQ volunteered to take the lead on contacting growers in the Southern Willamette Valley (GWMA), assisting them with chemical identification and coordinating repackaging efforts as needed. At the same time, EWEB and SUB sent out another round of postcards informing growers in the McKenzie and Middle Fork Willamette Watersheds of this additional opportunity to dispose of unwanted chemicals. Although response in these watersheds was obviously lower than the first

event, several growers who had not been able to participate the first time were able to take advantage of this additional opportunity.

The process followed for the second round of collection events was similar to the first round; the primary exception being that no public meetings were held. The second collection event was held over five days in February 2007.

**4) Results**

More than 120 growers from the McKenzie and Middle Fork Willamette Watersheds and Southern Willamette Valley GWMA participated in the agricultural chemical removal project. As a result of this effort, the Eugene Water & Electric Board (EWEB) and partner agencies successfully collected:

- 49,000 lbs of pesticides;
- 5,500 lbs of old fertilizer;
- 27,800 lbs of waste oil and solvents; and,
- 6,590 lbs of various other chemicals (paints, acids, oxidizers, caustics).

The majority of pesticides collected included obsolete chemicals such as DDT, paraquat, lindane, chlordane, dieldrin and others. Lane County Waste Management sorted, overpacked, and shipped the pesticides to Washington State for incineration. Fertilizers and other chemicals were properly disposed of or recycled depending on type and condition. Reusable waste oil was collected by Safety-Kleen, a company that re-refines the oil for reuse.

Not only was the Agricultural Chemical Removal Project successful in removing chemicals from a watershed and protecting drinking water resources, but it also was a boon for area growers. Disposing of chemicals is not cheap, and providing this service to growers free of charge saved them a significant amount of money. Estimates of disposal costs for growers who are Conditionally Exempt Generators (CEGs) (i.e. they produce less than 220 lbs of hazardous chemicals per month) are $5/gallon for poison solids and $9/gallon for poison liquids. Growers who produce more than that must obtain an EPA ID number (at $200-$250) and pay taxes on wastes that they dispose. If we assume that most growers fall within the CEG category, then this project may have saved them hundreds, if not thousands, of dollars in disposal costs.

The Agricultural Chemical Removal Project, which covered the McKenzie and Middle Fork Willamette Watersheds and the Southern Willamette Valley GWMA, was successful in removing a significant threat to drinking water (over 40 tons of chemicals), as well as reducing exposure to families, domestic animals, and endangered aquatic life. The project also engaged growers and increased their awareness of the connection between their farming practices and drinking water quality. It provided a relatively easy and free service to growers to dispose of hazardous chemicals that, in some cases, had been lying around farms for decades. The project served to enhance working relationships between local government agencies and local growers that will hopefully lead to additional collaboration opportunities in the future. In addition, the publicity from this project generated interest from growers outside of the collection area (as far away as Klamath Falls). We hope that this chemical removal project will be used a model for implementing additional collection events around the state and perhaps beyond.

**a) Outputs**

The following table, originally included in the project application, has been completed with the final results of this project. The table provides a summary of the primary grant activities that were carried out, their outputs, outcomes, and indicators, along with the baseline values, predicted values, and actual values achieved with the completion of this project.

| Activities | Project Outputs | Post-Project Outcomes | Indicator | Baseline Value | Predicted Value of Project Output | Actual Value of Project Output |
|---|---|---|---|---|---|---|
| Conduct outreach to growers. Use existing mailing lists to send project overview letter to growers. | Increased grower participation in one-time opportunity to dispose of obsolete chemicals at no cost or risk to the grower. | Increased awareness of risk to family and drinking water from chemicals. | Number of growers contacted | 0 | 450 | 1192 |
| Conduct survey of growers to determine type and quantity of chemicals and if assistance is needed. | Increased understanding of the magnitude of the problem. Increased contact with growers to make it as non-threatening and as easy to participate as possible. | Additional grower survey data for large scale risk assessment of obsolete farm chemicals. Increased awareness of risks to family and drinking water from chemicals and of watershed protection efforts. | Number of surveys sent to growers | 0 | 450 | 1178 |
| Analyze grower survey results | Assessment of participation in survey to determine follow-up outreach needs targeting unresponsive growers. Assessment of number of growers that | Gain better understanding of obstacles that prevent growers from participating in public projects. | Number of survey responses; number of growers needing assistance; quantity of chemicals inventoried | 110; 0; 0 | 180; 20; 6,000 gallons or 48,000 lbs | 126; 37; approx. 70,000 lbs |

| Activities | Project Outputs | Post-Project Outcomes | Indicator | Baseline Value | Predicted Value of Project Output | Actual Value of Project Output |
|---|---|---|---|---|---|---|
| | need assistance removing chemicals. | | | | | |
| Conduct follow-up survey that targets unresponsive growers. | Assessment of magnitude of risk to growers and drinking water supplies from obsolete agricultural chemicals. Increased contact with growers to make it as non-threatening and as easy to participate as possible. | Additional grower survey data for large scale risk assessment of obsolete farm chemicals. Increased awareness of risks to family and drinking water from chemicals and of watershed protection efforts. | Number of surveys sent to unresponsive growers | 110 | 340 | 553 |
| Conduct pre-collection event visits to farms that need assistance to assess conditions of chemicals. | Strengthened existing partnerships with local agencies. Increased grower trust; process that is as easy as possible for them to participate. | Demonstrate effective interagency coordination and partnerships to public. Increased grower participation on future watershed projects through sharing their positive experience with other growers. | Number of pre-collection event visits | 0 | 20 | 30 |
| Develop plan for interagency chemical collection based on survey results and farm | Documentation of collection event activities, agency roles, and contingencies. Strengthening of existing | Increased effectiveness of post-project evaluation by comparing planned sequence of events with | Presence of plan; Number of cooperating agencies in plan | No; 0 | Yes; 7 | Yes; 8 |

| Activities | Project Outputs | Post-Project Outcomes | Indicator | Baseline Value | Predicted Value of Project Output | Actual Value of Project Output |
|---|---|---|---|---|---|---|
| visits. | partnerships by paying attention to details to choreograph the event in a concise plan. | reality. Provide documentation for other areas in the State to use as a template for similar efforts. | | | | |
| Conduct grower outreach to provide information and maps on the upcoming chemical collection event. | Increased dialogue with growers, making it easy to participate, or contact project crews if last minute assistance is needed or if problems arise. | Demonstrated effective interagency coordination and partnerships to public. | Number of direct mailings to growers per plan | 180 | 450 | 5,494 (Includes initial outreach, reminder postcards, appoint-ment cards, thank-you notes, etc.) |
| Conduct chemical collection event to remove thousands of gallons of toxic chemicals from farms. | Increased protection of growers, drinking water resources and ESA species from chemical exposure. Increased awareness of risks from agricultural chemicals. | Increased awareness of effective interagency coordination. Increased grower awareness of risks from agricultural chemicals and long-term storage. Increased participation in future watershed projects. | Quantity of chemicals collected; Number of participants | 0: 0 | 7,000 gallons or 56,000 lbs; 190 | 85,340 lbs (~43 tons); 126 |
| Conduct post-project assessment and outreach. | Strengthened partnerships by evaluating lessons learned for application to future collaborative | Increased grower participation in future watershed projects. Increased sense | Average cost per farm; Average chemical quantity per farm; | 0; 0; No | $500 per farm; 35 gallons or 280 lbs per farm; Yes | $844 per farm; 677 lbs per farm; Yes |

| Activities | Project Outputs | Post-Project Outcomes | Indicator | Baseline Value | Predicted Value of Project Output | Actual Value of Project Output |
|---|---|---|---|---|---|---|
| | efforts. Increased grower awareness of risk of chemical exposure and impacts on drinking water resources. | of stewardship in growers that they are protecting their families and watershed. Valuable feedback from growers. | Presence of post-project report | | | |

Some of the main differences between the predicted and actual values of project output had to do with the fact that we held two different sets of collection events. After the Fall 2006 event, we still had enough grant funds to cover another round of collections. We decided to expand the area to include the Southern Willamette Valley Groundwater Management Area (GWMA), as it encompassed a large number of farms and was already at risk because of nitrate contamination. Thus, the number of surveys sent out greatly increased with the expanded population. Other discrepancies, such as the number of participants, arose largely because we just were not sure what kind of participation to expect. Overall, we greatly exceeded our predicted quantity of chemicals collected during this event.

**b) Post-project Outcomes**

One of the primary post-project outcomes is increased grower understanding of the risks to family and drinking water from chemicals, and awareness of ongoing watershed and groundwater protection efforts supported by EWEB, SUB, DEQ and other local agencies. In addition, we hope that the agricultural chemical collection event will also strengthen EWEB's relationship with growers in the McKenzie Watershed and encourage them to participate in future watershed projects. Finally, working together with other local agencies helps to build relationships and encourage joint projects in the future. One example of this is a current collaborative effort among the same agencies (plus a few new ones) to target local high school chemistry labs for chemical collection. This project will include collection of other school chemicals and promotion of green chemistry in classrooms.

## 5) Discussion & Adaptive Management

### a. Lessons learned and Transferability

**Lessons Learned**

While the primary goal of this project was to remove a threat to drinking water from the McKenzie and Middle Fork Watersheds, the project was also intended to be a pilot project for similar initiatives in other areas of the state. With this in mind, we have provided some lessons learned:

- **Development of Implementation Plan and Grower Databases:**
  Development of a project implementation plan (Attachment B) within the first month of the project was critical in making sure all the partners understood the specific tasks that were involved in the project, the sequence of events, their roles and responsibilities and the timeline that each partner had to complete their specific tasks to maintain the project schedule. EWEB drafted the initial plan and held meetings and discussions to incorporate each partner's comments, edits or suggestions to make sure that the final version reflected a common vision for the project.

  EWEB completed an initial design of an Access database to generate mailings and track responses and results from farm surveys. This was then provided to SUB and DEQ as a template for their use in the Middle Fork Willamette and GWMA areas, respectively. This allowed use of common databases to share and exchange data and query for mailing lists and chemical quantities and types based on survey results.

- **Scheduling/Timing of the Collection Events:** It is important to find a balance between growers' schedules and reasonable weather conditions. While our fall collection dates avoided the primary planting and growing seasons (spring and summer) and most of the harvest period, there were still some hazelnut farmers in the watershed who were finishing their harvesting right up until our collection events. This made initial outreach efforts to these growers difficult, as they did not have time to inventory and gather up their chemicals. With repeated outreach and follow-up by OSU Extension, as well as a deadline extension for returning chemical surveys, most of these growers eventually did end up participating – but only with this additional effort. However, we did not want to schedule events much later in the year due to increasingly inclement weather that could hinder transport of chemicals, as well as conflicts with the holiday season. Our second collection event, held in February, seemed to be a good time of the year for growers. However, inclement weather at this time of year is also a risk in this area.

  To facilitate scheduling when growers could deliver their chemicals to the collection event, we set up a shared-access Google calendar, which allowed people from four different agencies (EWEB, SUB, DEQ, OSU Extension) to view the schedule simultaneously and avoid scheduling growers for overlapping times.

- **Building Trust:** It is critical in a project like this to gain the trust of growers. Some growers were initially skeptical of participating in this event, especially when they could not remain anonymous. We had to repeatedly emphasize the fact that growers would not be regulated, investigated, or subjected to any enforcement actions by participating in the survey and chemical collection event. It was helpful that we had worked with a number of growers in previous projects and had started to build relationships with them. In addition, growers tended to trust Ross Penhallegon, from OSU Extension, with whom they had worked previously. The Oregon DEQ tried to stay a little bit more in the background, as growers often tend to distrust state regulatory agencies. Finally, word-of-mouth was extremely important in encouraging other growers to participate. Gaining the trust of a few key growers who could reach out to friends and neighbors should not be underestimated.

- **Public Meetings:** The public meetings held were poorly attended. This may have been due to the timing conflicts with harvest in early September, or perhaps initial skepticism. In any case, we found that word-of-mouth and one-on-one contact with growers was more effective in obtaining participation and therefore we did not hold any public meetings during the second round of collection events.

- **Conducting Farm Visits:** Although time-consuming, this service was critical for some growers who would not have participated otherwise. Several growers had old chemicals that they had "inherited" from family or previous farm owners that they could not identify. Other growers had chemicals in unstable packaging – for example, one grower had a 55-gallon drum precariously located on a steep slope and half buried in blackberry (see Figure 1). This grower was afraid the drum might break open if he attempted to move it. This process of identifying and packaging chemicals onsite involved multiple agencies and strengthened both inter-agency ties as well as relationships and trust with growers. It also gave local fire department personnel valuable experience in handling hazardous chemicals.

*Figure 1. Unstable drum on steep slope*

- **Use of Media:** For the most part, we used the media in a general sense, to publicize the fact that we received a grant from the Governor's Fund for the Environment to conduct a chemical collection event. However, a press release was issued the day before one of the last collection events and as a result, a number of farmers and residents from other areas showed up unannounced to dispose of chemicals. This reaffirmed the suspicion that press releases may generate significant interest, but that there is not much control over who participates, when they arrive to drop off chemicals, or the type and quantity of chemicals delivered.

Press releases are more effective to highlight the project and achieve recognition for the agencies and farmers that participated, especially after the event. As a result, there was reduced direct media coverage for the second round of collection events. Outreach efforts were focused on targeted publications, like the OSU Extension newsletter, watershed council newsletters, and other local publications and were developed in order to encourage project participation.

- **Disposal Costs:** It is important to budget for the hefty disposal costs associated with some of the chemicals that growers bring in for disposal. For example, two cylinders of bromine and anhydrous ammonia that were collected cost $1,907 and $1,656, respectively. It is a good idea to have a contingency source of funds that can be mobilized if necessary.

- **Packaging and Labeling Guidelines:** One recommendation for future projects is to distribute some written packaging and labeling guidelines to growers prior to the collection event so that they can pack and transport their chemicals in a safe manner. Some of this information was passed on to growers in general terms in the initial cover letter and in person if project staff talked to the grower directly. However, providing a detailed written document would be much more efficient and effective. For example, some growers brought containers to the disposal event that had pesticide residue or dust on the outside. Repacking these containers in carefully-labeled boxes or garbage bags would make categorization and disposal safer, easier, and more efficient for waste management personnel.

- **IGA for Waste Disposal:** It is important to agree upon and set up a clear process for how disposal costs are tracked and billed between partner agencies. For instance, in this project, Lane County Waste Management was collecting and shipping the chemicals off for disposal, but EWEB was administering the grant, and thus ultimately responsible for paying the disposal costs.

We hope that these lessons learned will be valuable to other agencies and locales as they consider coordinating a similar type of agricultural chemical collection event. We will be more than willing to serve as a resource for people who have questions about setting up and running such a project.

### b. Dissemination

The nature of the agricultural chemical event required a substantial amount of information dissemination to the general public, or more specifically, to growers in the McKenzie, Middle Fork Willamette Watersheds and Southern Willamette Valley GWMA. Introductory letters, farm chemical surveys, and several postcards were sent to growers to introduce the project, provide details and contact information, and encourage them to participate. (For quantitative measures of correspondence sent, see the Outputs table in the Results section).

In addition, the media was incorporated into public outreach efforts. During the Fall 2006 Agricultural Chemical Collection Event, both radio and TV were employed to publicize the event, reaching about 110,000 and 440,000 people, respectively. In addition, a number of newspapers and newsletters carried stories, or short segments about the collection events,

including the OSU Extension newsletter (circulation approximately 70,000), the EWEB internal newsletter (about 880), SUB newsletter (about 29,000), GWMA listserv, watershed council newsletters, organizational newsletters, and several local newsletters/newspapers. Both radio and newspapers/newsletters were used for the Winter 2007 collection event. Links to information about the Agricultural Chemical Collection Event, including a place to download the farm chemical survey, were placed on EWEB and OSU Extension websites. As mentioned in the lessons learned section, we tried to be prudent in when and where we published information about the events in order to avoid confusion and prevent people living outside the target area from "just showing up" at a collection event without following the necessary process.

Attachment D contains some selected postcards, letters and survey forms sent out to growers and Attachment E includes some photos from farm assistance visits and the chemical collection events.

### c. NFWF Adaptive Management

For the most part, the NFWF project administration requirements were easy to follow and understandable. There were a few times when we needed clarification on whether proposed changes in the project approach were still within the grant agreement (e.g., adding a second collection event that expanded the geographic scope of the project and use of HazMat contractors for farm visits when fire personnel were not available). NFWF was very responsive to our inquiries and provided quick and clear direction. The only part of the process that was somewhat confusing and took a while to grasp was the logic framework. In hindsight this makes sense, but during proposal development it was difficult to understand what was requested and make it meaningful to the project. We appreciated the samples provided and encourage NFWF to make additional samples available to assist future proposals.

## 6) References

Not applicable to this project.

**Approved: _____** **Date: _____**
Signature

Karl Morgenstern
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