APPENDIX C – PROJECT EXAMPLES

The examples below may provide insight into how to tailor the project proposal to meet the Nonpoint Source Pollution Reduction grant goals and priorities.

ON-THE-GROUND PROJECT EXAMPLES

Reducing and Preventing Nonpoint Source Pollution

Good Examples

- Installing livestock exclusion fencing to create a riparian buffer along 3,000 feet streambank.
- Restoring natural hydrology to a formerly channelized and drained floodplain.
- Relocating a frequently flooded farmstead up and out of the floodplain.

Poor Examples

- Installing doggy poo-bag dispensers and signage along a popular upland hiking trail in a watershed where land use is dominated by row crops and feedlots.
- Building a rain garden in a watershed with 240,000 acres of irrigated cropland.
- Armoring a streambank to reduce erosion caused by historic stream straightening.

Restoring and Protecting Natural Stream, Lake, and Wetland Processes

Good Examples

- Relocating an unpaved road up and out of a narrow stream corridor.
- Removing an abandoned railroad grade and restoring floodplain connectivity.
- Planting native riparian species and installing livestock exclusion fencing to restore and protect native vegetation communities.

Poor Examples

- Armoring a streambank with rock or a log matrix to prevent a natural channel avulsion.
- Realigning a stream and hardening the channel to prevent it from migrating through a hay field.
- Using a log weir, J-hook, or rock barb to divert the energy of a stream away from a road grade.

Sustainable Solutions

Good Examples

- The landowner attends the Agency Review Panel in-person to advocate for their project.
- The stream re-meandering project includes a 75-foot riparian buffer and extensive revegetation.
- The landowner completes a change of use agreement to ensure 2 cfs of water used previously for irrigation remains in the stream.

- The landowner indicates they only came to the watershed group for help after the local conservation district threatened to issue a 310 violation.
- The revegetation budget for a major stream reconstruction project is less than 2% of the total budget.
- The project proposal calls for implementation of a best management practice that has a 20-year expected lifespan, but it's apparent that if natural processes were allowed to continue, the problem would resolve itself in the same amount of time.

Readiness and Need

Good Examples

- The landowner and their downstream neighbor both participate in the Agency Review Panel meeting.
- At the time of application, the applicant has already involved the local fisheries biologist and floodplain administrator in the planning process.
- The applicant has either a history of successful contract management or applicable education.
- The landowner and other project beneficiaries have committed to providing time, money and other resources to the project commensurate with their ability to do so.

Poor Examples

- The project proposal includes riparian restoration along 3,000 feet of Purple Cow Creek. So far, only two of the three landowners involved have indicated support for the project.
- The project proposal includes design and implementation of a channel realignment project in a mapped floodplain on federal land. There have been no communications with the local floodplain administrator.
- The project will greatly improve fisheries on a private ranch owned by a wealthy landowner, but the landowner is only contributing \$100 to the project.

MINI-GRANT PROJECT EXAMPLES

Reducing and Preventing Nonpoint Source Pollution

Good Examples

- Mini-grants to pay for fencing, off-stream watering, wind shelters and hardened crossings to reduce grazing impacts on streambanks and riparian areas.
- Mini-grants to provide scholarships for high school and college students to attend stream restoration conferences and trainings.
- Mini-grants to subsidize native riparian plant distribution to lakeshore homeowners.

Poor Examples

- Mini-grants to pay for noxious weed biocontrol.
- Mini-grants to pay for installation of a 10-foot-wide riparian buffer.

Readiness and Need

Good Examples

- A conservation district partners with the local stockgrowers association to provide mini-grants to ranchers for off-stream watering.
- A statewide conservation organization provides scholarships for conservation district administrators and watershed group coordinators to participate in contract management training.
- A statewide conservation organization partners with MSU Extension to provide mini-grants and technical assistance to grazing districts to help set up forage use and riparian grazing monitoring programs.

- An applicant plans to partner with seven conservation districts to offer mini-grants to landowners for purchasing and planting native riparian plants. Only two CDs provide letters of support.
- A statewide conservation organization proposes to offer mini-grants to landowners to implement projects that address nonpoint source pollution generally but provides very few additional details.
- An environmental advocacy organization proposes to offer mini-grants to ranchers in eastern Montana to create 200-foot-wide riparian buffers to exclude grazing, with no evidence of local support.

Efficient Program Delivery

Good Examples

- Program includes well-defined, simple methods for measuring the success of individual projects and the program as a whole.
- The application process for an organization seeking a mini-grant involves a 2-page application form and a 30-day turnaround for a funding decision.
- Reporting requirements for a \$4,000 mini-grant include providing a maximum 3-page report
 with photos and results of pre-defined metrics for nonpoint source pollution prevention
 benefits.

Poor Examples

- Applicants for individual mini-grants must fill out a 10-page form, provide five letters of support and send in three years of financial statements to apply for funding.
- Mini-grant recipients are required to submit monthly project progress reports.

CAPACITY BUILDING EXAMPLES

Good Examples

- To develop a Watershed Restoration Plan or an alternative Plan in collaboration with all regional stakeholders including tribal representatives. Multiple stakeholder meetings have already occured, and this is the reasonable next step with community support to improve water quality.
- Development of a "showcase" of demonstration projects to encourage partnerships with regional stakeholders and landowners for additional water quality protection projects.
- An impairment or issue is defined, and project is to identify most effective restoration options and gain support. This would include the development of a Sampling and Analysis Plan and obtaining community buy in for future projects.

- Applicant wants to develop a Planning Document, but has not narrowed down area to focus on or received any community buy in.
- Project tour with only one project identified that has not been effective at reducing NPS.

EDUCATION OUTREACH EXAMPLES

This is a mix of examples that could be used as an Education Outreach application or to raise awareness about an on-the-ground project or mini-grant.

Defined Goals and Measurable Outcomes

Good Examples

- An organization wants to promote the behavior of planting and maintaining a 30-foot riparian buffer with agriculture landowners. The organization want to utilize community-based social marketing (CBSM) strategies (See Appendix D for more information) and applies for funding to implement:
 - o Phase 1 (Behavior Prioritization) to identify and prioritize end state target behaviors
 - Phase 2 (Barrier/Benefit Research and Strategy Recommendations) to identify barriers and benefits to the target behaviors
 - Phase 3 (Strategy Design) to develop a plan to begin this effort. The goal would be to have a strategy that would be ready to implement for pilot testing.
- To raise awareness of the value of native riparian buffers in urban areas, a watershed group
 applies to hold a parade of homes tour. It will feature homeowners who have benefited from
 maintaining or restoring native vegetation along their streambanks. The goal is to have at least
 40 streamside landowners participate and accept an invitation to have a revegetation specialist
 provide personalized recommendations for their property.
- A conservation district is planning a large riparian fencing and off-stream watering project on a
 ranch along Purple Cow Creek. The district will raise awareness about the project and encourage
 neighbors with grazing-impacted ranches to do similar work. The district tracks which
 landowners attend a tour and how landowners respond to an invitation to engage in similar
 work on their property.
- A conservation district administrator requests funding to attend a public procurement training
 and a stream restoration conference to learn how to better manage contracts and develop
 nonpoint source pollution prevention projects. The administrator provides a description in a
 status report of what he/she learned and how they will apply it.

Poor Examples

- A watershed group holds a seminar to teach real estate agents how to help landowners understand the importance of riparian buffers. At the end of the presentation, the real estate agents are given a brief survey to gauge what they have learned. No further follow-up occurs to determine whether any of the information from the seminar made it to landowners.
- A conservation district adds photos and a brief description of their newest stream restoration project to their monthly newsletter. No response is requested and no further follow-up occurs.

Appropriate Target Audience

Good Examples

- EO activities will focus on real estate agents in a watershed experiencing rapid population growth and lots of new construction.
- EO efforts will focus on reaching farmers with fields that are adjacent to a stream impaired due to excess nitrogen and phosphorus.
- EO efforts will focus on irrigators in a watershed where several streams are impaired due to hydrologic modification from irrigation diversions and return flows.

Poor Examples

- EO activities include providing regular project updates at watershed group board meetings.
- EO activities will focus on a campaign to encourage pet waste cleanup in a rural watershed with 80,000 acres of irrigated cropland and 67,000 head of cattle.
- EO activities will include a mass-mailing of livestock grazing BMP publications to every address in the entire county.

Appropriate Method of Delivery

Good Examples

- An organization has worked through the community-based social marketing strategies to identify the most effective method of delivery for their specific issue/community.
- A conservation organization representative personally attends local grazing district meetings to share information on the benefits of riparian condition monitoring.
- A local watershed group commissions a local artist to paint a mural on the side of an active grain elevator depicting the benefits of a healthy riparian area.
- A watershed group coordinator attends local homeowners' association meetings to explain the benefits of proper septic maintenance.

Poor Examples

- A watershed group uses their website and twitter account to advertise an upcoming cost-share opportunity for funding riparian fencing and off-stream watering facilities.
- A watershed group created a 2-hour YouTube video to teach homeowners the finer points of septic system maintenance.
- A conservation organization holds a public informational meeting at 7:30pm on a Friday night.

BIGGER PICTURE PRIORITIES

Environmental Justice

Good Examples

- Stream restoration in a handicap accessible public park.
- Riparian buffer creation adjacent to government-subsidized housing.
- Use of indigenous plants of cultural significance.
- Selection of best management practices that will not create an ongoing maintenance burden on local communities.
- Demonstration of tribal participation and perspective in project planning.
- Key community members involvement and leadership.

Poor Examples

- An in-stream habitat restoration project on a wealthy landowner's spring creek.
- Selection of best management practices that will require consistent maintenance funded by county residents.

Climate Change/Resilience

Good Examples

• Designs that include restoring natural process-based flood mitigation strategies, such as addition of meanders and adjacent wetlands to mitigate downstream flooding and late season drought.

- Complex riparian buffer planted along meanders to reduce stream temperature, provide cold water refuge for native trout, and promote biodiversity.
- Planting woody vegetation and using beaver dam analog structures to raise the local water table and encourage beaver recolonization.
- Replacement of a perched culvert with a bridge.

Poor Examples

- Streambank armoring.
- Establishing a monoculture along a streambank.
- A water consumption reduction project without a mechanism to guarantee water savings will remain in the stream.

<u>Impacts to Downstream Communities and Natural Systems</u>

Good Examples

- Reduction of nonpoint source pollution just upstream of a city's drinking water intake.
- Removal of toxic mine tailings in a headwaters stream that later meanders through a suburban neighborhood.
- Sediment pollution reduction upstream of a popular fishery.
- A floodplain reconnection and wetland restoration project that will attenuate flood waters upstream of a town.
- Creation of a wide riparian buffer to restore habitat connectivity between upstream and downstream sections of a river.

- Relocating a small horse corral out of the riparian area 30 miles upstream of the nearest town or impaired water.
- A habitat restoration project designed to benefit non-native rainbow trout.