

DELAWARE RIVER PROGRAM 2021 METRICS GUIDANCE



NFWF

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INTRODUCTION TO NFWF'S DELAWARE RIVER PROGRAM

DELAWARE WATERSHED CONSERVATION FUND

The Delaware Watershed Conservation Fund (DWCF) addresses near-term and long-range issues identified by the Delaware River Basin Restoration Partnership and Program [Framework](#), for measurable gains for fish and wildlife conservation, clean water, access to outdoor recreation, and other values and natural and economic benefits for people living in the basin. Major funding for the DWCF is provided by the U.S. Fish and Wildlife Service. The fund was launched in 2018 as a first step toward delivering the Delaware River Basin Conservation Act, bringing together various stakeholders invested in restoration and conservation efforts throughout the Delaware River Watershed to address different strategic program areas and cross-program activities, build networks, and improve efficiency and focus on a basin-wide scale. DWCF projects are implemented entirely within the Delaware River watershed. The fund's investments target areas of regional significance for restoration and conservation in order to support ongoing efforts, increase capacity, and facilitate maximum adaptive potential in changing watershed conditions.

DELAWARE RIVER RESTORATION FUND

The Delaware River Restoration Fund (DRRF) is dedicated to improving the water quality and accelerating restoration of habitats in the Delaware River and its tributaries. The fund was launched in late 2013 to help community-based nonprofits, municipalities and landowners efficiently work together to clean up and restore polluted waters and improve habitat in strategic geographies within the Delaware Watershed. With major support from the William Penn Foundation, the DRRF is the primary on-the-ground restoration funding mechanism for the [Delaware River Watershed Initiative](#) (DRWI). DRRF investments for water quality improvement are targeted primarily to DRWI "Clusters," subwatersheds within the broader Delaware River Watershed where restoration efforts are expected to realize the greatest return.

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GENERAL METRICS INFORMATION

METRICS OVERVIEW

To assess project progress and ensure greater consistency of data provided by multiple grants, the Delaware River Program provides a list of metrics in Easygrants. In addition to metrics in Easygrants, grantees can gather more detailed site and practice-level data via FieldDoc.org (see Review Resources for additional details), as applicable.

The metrics section of the Full Proposal allows you to select the activity and outcome metrics you will use to measure your project's progress and success. Follow the directions provided in Easygrants to complete this section. A couple of general pointers:

- Hover your mouse cursor over the “?” next to a metric to read its description and specific guidance.
- Please “Add” and complete at least one metric relevant to reporting your project's progress.
- For each metric you will need to provide values for “Starting Value” and “Target Value.” In most cases the starting value will be zero (0). *The only instance when the starting value will not be zero is when you are applying for a second or third phase of a project previously funded by NFWF.*
- In your project narrative, you will have the opportunity to describe additional activities and outcomes associated with your project.
- Please only select metrics associated with the project elements for which you are requesting funding in this grant.

To increase consistency in the usage and calculations of metrics, the NFWF Delaware team has created this “2021 Metrics Guidance” document to provide additional details and instructions about each metric. Please ensure that, upon choosing a metric to include in your proposal, the calculation of the target value accounts for the details listed for the metric in this guide.

COMMON MISTAKES

1. **Double Counting.** One practice/implementation technique should not be counted under two different metrics (with the same measurement, eg. acres). For example, if implementing a wetland restoration and selecting “Wetland restoration - Acres restored,” do not also select “BMP implementation for nutrient or sediment reduction - Acres with BMPs” for the same spatial area. Complementary metrics (with different measurements, eg. miles opened and # barriers) can be selected for one practices/implementation technique.
2. **Not Including Metric Notes.** Metrics notes are an opportunity to expand on and explain calculations, practice details, and target values. If notes are necessary to understanding a practice, the instructions will specify what should be included, at a minimum, in the notes. Insufficient metric notes will be sent back for revisions.
3. **Counting Planning as Implementation.** If the project includes planning, research, engineering/design, or technical assistance, the *future* implementation resulting from that work should not be counted under any habitat management or habitat restoration metrics. Please use the “Planning, Research, Monitoring” metrics.
4. **Not Accounting for COVID-19 Restrictions/Limitations.** Use the NOTES section to indicate how the target value has been adapted to account for COVID-19 limitations. This is particularly relevant for outreach metrics such as # volunteers participating.
5. **Target Value Lower Than Starting Value.** If the starting value is not zero, the target value should be the value to be achieved by the NFWF project within the period of performance *plus* the starting value. The only instance when the starting value will not be zero is when you are applying for a second or third phase of a project previously funded by NFWF.
6. **Using “People with Changed Behavior” Instead of “People Reached” Metric.** Changed behavior must be a MEASURABLE behavior with a baseline value upon which grant outcomes can be compared. Social media campaigns, signage, etc. (passive engagement) should not be counted under behavior change.

LIST OF AVAILABLE METRICS

Metrics available to pick in Easygrants. Additional details and instructions for each metric are included in the next section.

HABITAT RESTORATION

- DRRF - Beach habitat quality improvements - Miles restored
- DRRF - Erosion control - Acres restored
- DRRF - Fish passage improvements - # passage barriers rectified
- DRRF - Fish passage improvements - Miles of stream opened
- DRRF - Floodplain restoration - Acres restored
- DRRF - Instream restoration - Miles restored
- DRRF - Riparian restoration - Miles restored
- DRRF - Wetland restoration - Acres restored

HABITAT MANAGEMENT

- DRRF - BMP implementation - Miles of stream with reduced and/or protected water temperature
- DRRF - BMP implementation for fencing improvements - Miles of livestock fencing improved or installed
- DRRF - BMP implementation for nutrient or sediment reduction - Acres with BMPs
- DRRF - BMP implementation for nutrient or sediment reduction - Lbs N avoided (annually)
- DRRF - BMP implementation for nutrient or sediment reduction - Lbs P avoided (annually)
- DRRF - BMP implementation for nutrient or sediment reduction - Lbs sediment avoided (annually)
- DRRF - BMP implementation for prescribed burns - Acres burned
- DRRF - BMP implementation for stormwater runoff - Acres with BMPs
- DRRF - BMP implementation for stormwater runoff - Volume stormwater prevented
- DRRF - BMP implementation to mitigate recreational disturbance - Miles with BMPs
- DRRF - Green Infrastructure - # trees planted
- DRRF - Early successional forest - Improved management practices - Acres under improved management
- DRRF - Improved management practices - Acres under improved management
- DRRF - Late successional forest - Improved management practices - Acres under improved management
- DRRF - Mature forest - Improved management practices - Acres under improved management

CAPACITY, OUTREACH, INCENTIVES

- DRRF - Economic benefits - # jobs created
- DRRF - Outreach/ Education/ Technical Assistance - # people reached
- DRRF - Outreach/ Education/ Technical Assistance - # people with changed behavior
- DRRF - Public Access - # acres with public access
- DRRF - Volunteer participation - # volunteers participating

PLANNING, RESEARCH, MONITORING

- DRRF - Management or Governance Planning - # plan activities implemented
- DRRF - Monitoring - # monitoring programs

DRRF - Monitoring - # sites being monitored

DRRF - Project Management - Acres with transaction costs and project mgmt activities addressed

DRRF - Research - Miles assessed

DRRF - Tool development for decision-making - # tools used by decision-makers



METRICS DESCRIPTION AND TIPS

| HABITAT RESTORATION | | | | |
|------------------------------------|------------------------------|--|---|---|
| PRACTICE | METRIC | INSTRUCTIONS | IMPLEMENTATION EXAMPLES | ADDITIONAL TIPS |
| Beach habitat quality improvements | Miles restored | Enter number of miles of restored or protected beach/shoreline habitat; do not double count with erosion/acres restored | Dune restoration, beach plantings, beach protection practices | |
| Erosion control | Acres restored | Enter the number of acres restored; enter specific type of coastal/shoreline habitat and restoration in NOTES section | Living shoreline, natural revetments/breakwater systems | Buffers should be “Riparian Restoration;” bank stabilization should be “Instream Restoration” – do not double count |
| Fish passage improvements | # passage barriers rectified | | Dam removal, culvert replacement | |
| Fish passage improvements | Miles of stream opened | Enter the number of miles of stream opened to improve aquatic habitat connectivity; if Lake or Pond specify in NOTES section; if improving or increasing eastern brook trout patch sizes, specify in NOTES | Dam removal, culvert replacement, fish passage enhancements | |
| Floodplain restoration | Acres restored | Enter the number of acres restored | Reestablishment of function of floodplains natural conditions (leveling degraded stream-banks, planting native species) | Must be active restoration/reconnection (not just land taken out of production); note if restoration enhances stream resilience |
| Instream restoration | Miles restored | Enter the number of miles restored; briefly indicate the type of restoration in the NOTES section | Channel modification, bank stabilization, bed stabilizations, stream diversions, habitat enhancements like woody debris and other hydrological improvements | Do not double count with “Riparian Restoration,” note if restoration enhances stream resilience |
| Land, wetland restoration | # trees planted | Enter the number of trees planted and sustained (tree plantings that are urban/green infrastructure can also be included), use the NOTES section to indicate the type of planting, density per acre, and mortality rate. Do not include any additional trees planted to replace mortality in the numerical metric value. | Urban forestry, buffer plantings, habitat restoration | |
| Riparian restoration | Miles restored | Enter miles of riparian areas restored; indicate the type of buffer (e.g. forested, vegetated), buffer width, and acres in the NOTES section. DO NOT include instream restoration. | Forested buffers, vegetated buffers, grass buffers | Buffers are typically 35-100ft in width, please note the average width |
| Wetland restoration | Acres restored | Enter the number of acres restored or enhanced. DO NOT include riparian or instream restoration miles in this measurement. | Re-establishment (rebuilding former wetland) or rehabilitation (repairing degraded wetland) | |

HABITAT MANAGEMENT

| PRACTICE | METRIC | INSTRUCTIONS | IMPLEMENTATION EXAMPLES | ADDITIONAL TIPS |
|---|---|---|---|--|
| BMP implementation | Miles of stream with reduced and/or protected water temperature | Enter the number of stream miles with BMPS to reduce and/or protect water temperature. Use the NOTES section to describe the actual degree decrease (or maintenance) of temperature. | Tree planting or riparian buffers that reduce stream temperature | |
| BMP implementation for fencing improvements | Miles of livestock fencing improved or installed | Enter miles of fencing and indicate type of improvements or if the fencing is new construction in the NOTES section. | Improving existing fence AND/OR construction of <i>new</i> fence to keep livestock out of stream | Can be counted with miles of riparian restoration for streamside forest buffer with exclusion fencing |
| BMP implementation for nutrient or sediment reduction | Acres with BMPs | Enter number of acres; indicate the type of BMP(s) (e.g. manure storage, cover crops) and indicate method of calculating reduction in NOTES section. Please see the DWCF toolbox on the website for calculation resources. | Barnyard runoff controls, cover crops, no till, nutrient management, prescribed grazing, roof runoff management, manure storage | Do not double count with “BMP implementation for stormwater runoff – Acres with BMPs.” |
| BMP implementation for nutrient or sediment reduction | Lbs N avoided (annually) | Enter the amount of nitrogen prevented from entering system annually and indicate method of calculating reduction in NOTES section | N, P and S reduced by implementation of BMPs (agriculture or stormwater) | Values can be calculated using the FieldDoc.org platform |
| BMP implementation for nutrient or sediment reduction | Lbs P avoided (annually) | Enter the amount of phosphorous prevented from entering system annually and indicate method of calculating reduction in NOTES section | | |
| BMP implementation for nutrient or sediment reduction | Lbs sediment avoided (annually) | Enter the amount of sediment prevented from entering system annually and indicate method of calculating reduction in NOTES section | | |
| BMP implementation for prescribed burns | Acres burned | Enter the number of acres that have been treated by prescribed burning; indicate whether this is private or public land in NOTES section | Prescribed burns for habitat improvement, invasive species control, forest management, etc. | |
| BMP implementation for stormwater runoff | Acres with BMPs | Enter number of acres treated with stormwater BMP(s); indicate the type of BMP(s) (e.g., rain gardens, constructed wetlands, green roofs, rain barrels, etc.) and inches of rainfall that will be stored, infiltrated and/or filtered within a 48-hour rain event in NOTES section. Include method of calculation; please see the DWCF toolbox on the website for calculation resources | Bioretention, green roofs, permeable pavement, bioswales, rain gardens, etc. | Do not double count with “BMP implementation for nutrient or sediment reduction – Acres with BMPs” as that is primarily for acres treated with agriculture BMPs Make sure that the acreage is the total TREATED acres (the practice drainage area), not just the practice footprint. |

HABITAT MANAGEMENT CONTINUED

| PRACTICE | METRIC | INSTRUCTIONS | IMPLEMENTATION EXAMPLES | ADDITIONAL TIPS |
|---|---------------------------------|---|---|--|
| BMP implementation for stormwater runoff | Volume stormwater prevented | Enter the volume (in gallons) of stormwater prevented from entering the system per year; indicate type of BMP(s) in the NOTES section; include method of calculation. Please see the DWCF toolbox on the website for calculation resources. | Bioretention, green roofs, permeable pavement, bioswales, rain gardens, etc. | Value is annual, value can be calculated using the FieldDoc.org platform |
| BMP implementation to mitigate recreational disturbance | Miles with BMPs | Enter the number of miles with BMPs to mitigate recreational disturbance | Increase stewardship protection programs, beach closures, beach fencing or signage | Can be complementary to capacity/outreach/incentives metrics such as volunteers participating |
| Early successional forest - Improved mgmt. practices | Acres under improved management | Enter the number of acres under improved management; use the NOTES section to indicate full parcel size benefitting from acres under management | Comprehensive forest management plans, active forest restoration, edge improvement, canopy openings, invasives management, etc. for habitat improvement | |
| Late successional forest - Improved mgmt. practices | Acres under improved management | Enter the number of acres under improved management; use the NOTES section to indicate full parcel size benefitting from acres under management | | |
| Mature successional forest - Improved mgmt. practices | Acres under improved management | Enter the number of acres under improved management; use the NOTES section to indicate full parcel size benefitting from acres under management | | |
| Improved management practices | Acres under improved management | Enter the number of acres under improved management, enter type of land (i.e. public or private), and enter specific practice(s) in NOTES section; DO NOT double count with acres of BMPs | | Management plans completed (including ag Comprehensive Nutrient Management Plans), invasive management, water control structure management |

CAPACITY, OUTREACH, INCENTIVES

| PRACTICE | METRIC | INSTRUCTIONS | IMPLEMENTATION EXAMPLES | ADDITIONAL TIPS |
|---|--------------------------------|---|---|--|
| Economic benefits | # jobs created | Enter the number of jobs created; indicate workforce targeted in NOTES section (e.g. youth, veterans, underserved communities) | Construction, forestry, technical assistance, landscaping, recreation, etc. jobs created by restoration work | Starting value can be permanent FTE jobs preserved through the project |
| Outreach/ Education/ Technical Assistance | # people reached | Enter the number of people who responded to an offer and inquiry delivered by outreach, training, or technical assistance activities; specify the percentage of individuals reached; indicate type of audience (farmers, landowners, municipalities) in the NOTES section | People attending workshops/speaker series, people attending nature walks, people present at site visits | Who is being reached? How are they being reached? |
| Outreach/ Education/ Technical Assistance | # people with changed behavior | Enter the number of individuals demonstrating a minimum level of behavior change; briefly describe method of measurement in NOTES section. Characterize the audience (farmers, landowners, municipalities) in the NOTES section | Measured community-based social marketing campaign, landowner training that results in documented implementation | Do not double count with volunteers or people reached. Changed behavior must be a MEASURABLE behavior with a baseline value upon which grant outcomes can be compared. What is the behavior being changed? How is it measured? |
| Public Access | # acres with public access | Enter the number of acres now open to public access as a result of the project; include any associated river or stream miles also opened to public access as a result of project | Rehabilitation or construction of boat access facilities, increase access to protected lands with public benefits, development of a new trail | Should be <i>new</i> public access, not just projects on land that is accessible to the public. Use NOTES section to indicate what kind of access: general public use, trails, etc.; do best to translate stream miles into acres and note the calculation used in NOTES section |
| Volunteer participation | # volunteers participating | Enter the number of volunteers participating | Volunteer tree planting, volunteers monitoring beaches for recreational disturbance | Unpaid volunteer time can be used as in-kind match. Use the NOTES section to describe: Who are the volunteers? What are they doing? |

PLANNING, RESEARCH, MONITORING

| PRACTICE | METRIC | INSTRUCTIONS | IMPLEMENTATION EXAMPLES | ADDITIONAL TIPS |
|--------------------------------------|--|---|---|---|
| Monitoring | # monitoring programs | Enter the number of monitoring programs established, underway or improved; briefly describe what is being monitored in the NOTES section | Stewardship/volunteer monitoring program, academic monitoring of ongoing work | Since the metric includes programs underway, if the project continues monitoring efforts, the starting value should be zero. |
| Monitoring | # sites being monitored | Enter the number of streams/sites being monitored; briefly describe what is being monitored in NOTES section; include miles/acres/area covered by monitoring | Integrated water quality monitoring sites, citizen monitoring sites, bird count/survey sites, run count sites | |
| Project Management | Acres with transaction costs and project mgmt activities addressed | Enter the number of acres for which conservation easements and acquisitions will be facilitated; for land protection project management activities, e.g. surveys, appraisal, environmental report | Land put in easement/acquisition (with match or non-NFWF funding) for which project funds assisted in facilitation (legal fees, surveys, appraisals, reports) | Okay to double count with acres of new access if protected land will also be open to the public (made possible by NFWF funds) |
| Research | Miles assessed | Enter the number of stream, river, beach or shoreline miles assessed; briefly describe the assessment aim in the NOTES section | Culvert assessments, stream connectivity assessments, shoreline erosion assessments, prioritization efforts | |
| Tool development for decision-making | # tools used by decision-makers | Enter the number of tools developed that are used by decision-makers; briefly describe the tool in the NOTES section | Site prioritization analysis, engagement toolkit | Should be <i>new</i> tools, not existing ones used for the project |

METRICS RESOURCES

To assist applicants in generating credible metric estimates, NFWF has partnered with the Chesapeake Commons and the Academy of Natural Sciences to functionalize FieldDoc, a user-friendly tool that allows consistent planning, tracking, and reporting of water quality improvement activities and associated nutrient and sediment load reductions from proposed grant projects.

NFWF encourages all projects proposing to implement on-the-ground water quality improvements to utilize FieldDoc to calculate estimated load reductions included in their application. When setting up proposed projects in FieldDoc, please be sure to list your application's 5-digit Easygrants number in the FieldDoc project title.

Upon grant award, NFWF will work closely with all projects using with FieldDoc for accurate tracking and reporting of applicable water quality improvement activities during the course of the grant project. For technical support on FieldDoc utilization during the proposal development process, please contact Erin Hofmann with the Chesapeake Commons at hofmann@chesapeakecommons.org. Additional guidance is available at [help.fielddoc.org](https://www.fielddoc.org/help).

A list of available practices for tracking in FieldDoc is available here: <https://www.fielddoc.org/models/6>

2021 Request for Proposals [PDF](#)

NFWF Website Resources

[Delaware River Program Page](#)

[Applicant Information](#)