

# Quantitative Assessment Sheet (QAS)

## NFWF required metrics

The QAS addresses proposed project impacts towards achieving the DRE goals.

#	Assessment Criteria	Checklist/ Metrics
<b>QAS 0.1</b>	<b>Proposal name.</b> _____	<input type="checkbox"/> complete
<b>QAS 0.2</b>	<b>(NFWF RFP Metric) Economic benefits.</b> Enter the number of jobs created as a result of the project.	_____ # jobs created
<b>QAS 0.3</b>	<b>(NFWF RFP Metric) Volunteer participation.</b> Enter the number of volunteers participating in the project.	_____ # volunteers participating in projects
<b>QAS 0.4</b>	<b>(NFWF RFP Metric) Monitoring.</b> Enter the # sites being monitored.	_____ # sites being monitored
<b>QAS 0.5</b>	<b>Proposed strategies</b> (per the public ranking as outlined below), check below all that are proposed: <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Restore upper watersheds to reduce floods and sediments washing into the valley, including adapting grazing management to advance and support restoration and respond to droughts</li> <li>2. <input type="checkbox"/> Projects that recharge groundwater aquifers through capturing a portion of stormwater/flood flows and/or maintaining flows for downstream riparian areas</li> <li>3. <input type="checkbox"/> Achieve groundwater resiliency for today and future generations (recharge to the aquifer is balanced with groundwater use by combinations of strategies)</li> <li>4. <input type="checkbox"/> Create and/or sustain areas of bosque (which has river health, wildlife habitat, and recreation benefits), with an emphasis on high quality habitat for native riparian birds</li> <li>5. <input type="checkbox"/> Integrated river management program to restore a bosque, natural river health and functions, and riparian habitat throughout the river corridor</li> <li>6. <input type="checkbox"/> Use of stormwater/flood flows as an alternative water source for agriculture and bosque riparian areas</li> <li>7. <input type="checkbox"/> Add ability for flood control dams to store stormwater for agricultural and recharge use</li> </ol>	<input type="checkbox"/> complete

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	<p>8. <input type="checkbox"/> Policies and programs to voluntarily incentivize farm water demand reduction and conservation (e.g. cover crops, shifts to profitable low-water use crops)</p> <p>9. <input type="checkbox"/> Reduce flood risks and sediment transport into valley through improving built infrastructure</p> <p>10. <input type="checkbox"/> Improve Elephant Butte Irrigation District infrastructure to conserve water</p> <p>11. <i>Other major strategy categories provided by survey participants:</i></p> <p style="margin-left: 40px;">a. <input type="checkbox"/> Increase water quality and safety</p> <p style="margin-left: 40px;">b. <input type="checkbox"/> Include public education and engagement in projects</p> <p style="margin-left: 40px;">c. <input type="checkbox"/> Modify governance and increase planning</p> <p>12. Other not included above, but are eligible under this program</p> <hr/>	
<b>QAS 1</b>	<b><i>Goal 1: Reduce damage from flooding and sedimentation</i></b>	
<b>QAS 1.1</b>	<b>(NFWF RFP Metric) Best management practices (BMP) implementation for nutrient or sediment reduction.</b> Acres with BMPs to reduce stormwater or sediment loads (enter the number of acres with nature-based upper watershed restoration practices to reduce stormwater and sediment flows).	_____ acres
<b>QAS 1.2</b>	<p><b>(NFWF RFP Metric) Increase stormwater storage.</b> Gallons stormwater storage added (enter the volume in gallons of additional stormwater storage created by water infrastructure projects).</p> <p><u>Convert stormwater capture capacity to acre-feet</u></p> <p><u>Nature of capacity.</u> Specify if stormwater capture is for the purpose of flood control, will not be held longer than 96 hours, and/or if it will also be stored for longer than 96 hours for beneficial use.</p> <p><u>Beneficial use.</u> In Notes section, if applicable, specify the beneficial use.</p> <p><u>Notes:</u></p>	<p>_____ gallons</p> <p>_____ acre-feet</p> <p><input type="checkbox"/> purpose flood control</p> <p><input type="checkbox"/> not held longer than 96 hours</p>

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		<input type="checkbox"/> held longer than 96 hours for beneficial use
<b>QAS 1.3</b>	<b>Peak flow change at point downstream of project.</b> Enter the peak flow change for design storms (2-yr 1 hr, 500-yr 24-hr). Note this is also a proxy for sediment load reduction (the lower the energy, the less scouring effect of runoff). For a description of the assessment methodology, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRRI Quantitative Technical Assistance” section 5 Goal 1.	<div>_____ % relative to 2-yr 1 hr design storm</div> <div>_____ % relative to 500-yr 24-hr design storm</div>
<b>QAS 1.4</b>	Question omitted	
<b>QAS 2</b>	<b><i>Goal 2: Promote aquifer recharge through stormwater management</i></b>	
<b>QAS 2.1</b>	<p><b>(NFWF RFP Metric) Increase stormwater storage.</b> Gallons stormwater storage added (enter the volume in gallons of additional stormwater storage created by water infrastructure projects).</p> <p><u>Convert stormwater capacity to acre-feet</u></p> <p><u>Nature of capacity:</u> Specify if stormwater capture is for the purpose of flood control, will not be held longer than 96 hours, and/or if it will also be stored for longer than 96 hours for beneficial use.</p> <p><u>If applicable, specify the beneficial use in the notes section.</u></p> <p><u>Notes:</u></p>	<div>_____ gallons</div> <div>_____ acre-feet</div> <div><input type="checkbox"/> purpose flood control</div> <div><input type="checkbox"/> not held longer than 96 hours</div> <div><input type="checkbox"/> held longer than 96 hours for beneficial use</div>

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#	Assessment Criteria	Checklist/ Metrics
QAS 2.2	<b>Recharge volume change.</b> Enter the estimated recharge volume change for design storms (2-yr 1 hr, 500-yr 24-hr). For a description of the assessment methodology, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRI Quantitative Technical Assistance” section 5 Goal 1 and 2.	<div>relative to 2-yr 1 hr design storm</div> <div>relative to 500-yr 24-hr design storm</div>
QAS 3	<b>Goal 3: Improve infrastructure to manage water</b>	
QAS 3.1	<b>(NFWF RFP Metric) Improve or construct new water delivery infrastructure.</b> Enter the number of water infrastructure projects constructed or modified to improve water management.	____ # of water infrastructure projects executed
QAS 3.2	<b>(NFWF RFP Metric) Increase stormwater storage.</b> Gallons stormwater storage added (enter the volume in gallons of additional stormwater storage created by water infrastructure projects).  <u>Convert stormwater capacity to acre-feet</u>	<div>____gallons</div> <div>____ acre- feet (capacity)</div>
QAS 4	<b>Required Goal 4 (all projects must include this goal): Create and/or sustain habitat and promote watershed health</b>	
For regional information and assessments to assist answering questions in this section, see <a href="https://storymaps.arcgis.com/stories/9624a5b076f942f09427365f94537479">https://storymaps.arcgis.com/stories/9624a5b076f942f09427365f94537479</a>		
QAS 4.1	<b>(NFWF RFP Metric) Riparian restoration.</b> Enter # of riparian acres restored, including riparian buffers to benefit native riparian vegetation and federally protected birds. In NOTES section, specify landcover type prior to planting (barren, cropland, grassland), dominant vegetation being planted (Broadleaf, Conifer, Shrub, Grass, Marsh, Wet meadow, Swamp), and average width of riparian buffer.  <u>Notes:</u>	_____ # of riparian acres restored

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QAS 4.2	<p><b>Non-riparian restoration.</b> Enter # of acres restored. In Notes section, specify landcover type prior to planting (barren, cropland, grassland), dominant vegetation being planted (Broadleaf, Conifer, Shrub, Grass, Marsh, Wet meadow, Swamp).</p> <p><u>Notes:</u></p>	<p>_____</p> <p># of non-riparian acres restored</p>
QAS 4.4	<p><b>Habitat existing conditions.</b> In Notes section, specify the existing conditions indicated by the New Mexico Riparian Habitat Map (NMRipMap, <a href="https://nhnm.unm.edu/riparian/NMRipMap">https://nhnm.unm.edu/riparian/NMRipMap</a>). For a description of the assessment methodology, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRI Quantitative Technical Assistance” section 5 Goal 4.</p> <p><u>Notes:</u></p>	<p><input type="checkbox"/> complete</p>
QAS 4.5	<p><b>Habit general target.</b> Check all that apply. For a description of the assessment methodology, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRI Quantitative Technical Assistance” section 5 Goal 4.</p> <p><input type="checkbox"/> Suitable for Target species (SWFL and/or Cuckoo)</p> <p><input type="checkbox"/> Riparian general avian</p> <p><input type="checkbox"/> Upland general avian</p>	<p><input type="checkbox"/> complete</p>
QAS 4.6	<p><b>Habit site potential class.</b> Indicate the class of current and proposed habitat potential for your project. If multiple classes, check all that apply. For a description of the assessment methodology, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRI Quantitative Technical Assistance” section 5 Goal 4.</p> <p><b><u>SWFL and Riparian and/or Upland generalist avian habitat site potential</u></b></p> <p><b>Existing / Proposed</b></p> <p><input type="checkbox"/> / <input type="checkbox"/> BOR 2023 SWFL Class 0</p> <p><input type="checkbox"/> / <input type="checkbox"/> BOR 2023 SWFL Class 1</p> <p><input type="checkbox"/> / <input type="checkbox"/> BOR 2023 SWFL Class 2</p> <p><input type="checkbox"/> / <input type="checkbox"/> BOR 2023 SWFL Class 3</p>	<p><input type="checkbox"/> complete</p>

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	<input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 SWFL Class 4</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 SWFL Class 5</b> <b>Establish breeding site less than 13 KM from existing habitat</b> <u><b>Cuckoo habitat site potential</b></u> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 0</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 1</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 2</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 3</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 4</b> <input type="checkbox"/> / <input type="checkbox"/> <b>BOR 2023 Cuckoo Class 5</b> <input type="checkbox"/> / <input type="checkbox"/> <b>Establish breeding site less than 3 km from existing habitat</b>	
<b>QAS 4.7</b>	<b>Revegetation strategies.</b> In Notes section, specify the proposed quantities and species of plants and plant communities, targeted density or plant cover, the water source, and other practices to sustain revegetation over time. For a description of the recommended plant communities per general riparian conditions, see “Information on the Quantitative Assessment Sheet (QAS) and NM WRI Quantitative Technical Assistance” section 5 Goal 4. <u>Notes:</u>	<input type="checkbox"/> complete
<b>QAS 5</b>	<i>Checklist of additional metrics or items that further inform the reviewers regarding the quantitative assessment, recommended by stakeholder reviewers to be included in proposal</i>	
<b>QAS 5.1</b>	<b>Proposal cost.</b> Enter the total proposed cost for the proposal project to assist reviewers in comparison of cost to these quantified benefits.	<hr/> Total cost

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<b>QAS 5.2</b>	<b>Expected benefits.</b> In the proposal, specify the expected benefits upon project installation and over the long term, and the immediate needs and root of issue being addressed. Indicate if the benefits can be reasonably expected to increase over time. Where possible, describe the benefits to the watershed functions (e.g. vegetation cover expanded to increase the function for recharge; improved or expanded habitat providing multiple functions such as increasing soil health, soil organic matter and water holding capacities).	<input type="checkbox"/> included in proposal
<b>QAS 5.3</b>	<b>Additional water consumption reduction expected benefits.</b> In Notes section, specify mechanism (e.g. reduced pumping by farmers). <u>Notes:</u>	_____ acre-foot / _____ unit (e.g. year)
<b>QAS 5.4</b>	<b>Additional water management and other multi-functional benefits.</b> In the proposal, specify and quantify if possible estimates of benefits in addition to water conservation, such as agricultural economics, management efficiency, or infrastructure function improvements.	<input type="checkbox"/> included in proposal
<b>QAS 5.5</b>	<b>Water use.</b> For projects that aim to use water (i.e. stormwater or irrigation water), in the proposal, provide a description of who will use water and for what purpose.	<input type="checkbox"/> included in proposal
<b>QAS 5.6</b>	<b>Sustaining revegetation over time.</b> In the proposal, specify the water source and other practices to sustain revegetation over time.	<input type="checkbox"/> included in proposal
<b>QAS 5.7</b>	<b>Negative effects and mitigation efforts.</b> In the proposal, include a description of anticipated significant negative effects, impairments, or trade-offs on existing conditions including environmental, water use, and management, and efforts to mitigate effects.	<input type="checkbox"/> included in proposal
<b>QAS 5.8</b>	<b>Project site assessment.</b> Conduct during the project development stage, provide in Notes section for Information Part A, and include in the proposal descriptions and pictures of site observations of existing vegetation conditions and at areas of reference if available (a site that represents the design target). As well, ideally prior to proposal submission, but at a minimum as a first proposed project task,	<input type="checkbox"/> included in proposal

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	<p>Proposal Teams should also include in proposals groundtruthing the existing conditions and conditions at areas of reference, including testing soils to determine soil type (texture class), determining depth to groundwater, and surveying existing vegetation conditions to validate the site potential.</p> <p>Notes:</p>	