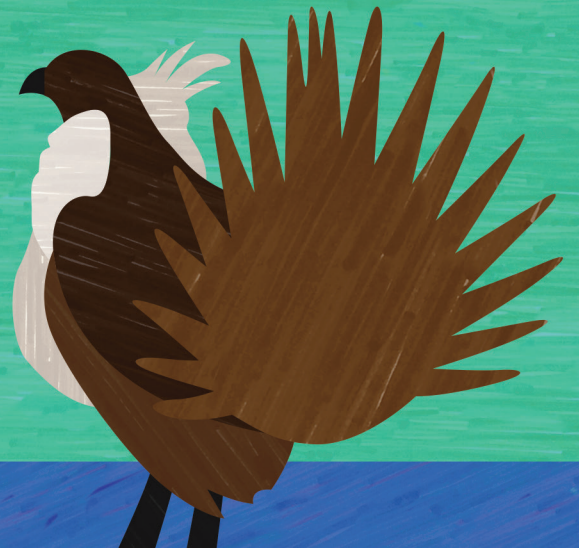


# HABITAT QUANTIFICATION TOOL



## A PATH TO RECOVERY FOR THE GREATER SAGE-GROUSE

*Traditional conservation tools focus on acreage, but not enough on the quality of those acres. The **Habitat Quantification Tool (HQT)** – developed by EDF in conjunction with scientists and technical experts – uses a different approach designed to bring greater confidence to conservation decisions.*

The HQT evaluates both quantity *and* quality of habitat using a unit called “functional acres.” Habitat quality is determined using the best available science on a particular species’ habitat needs. By using this tool before, during and after a conservation or development project, regulatory agencies can more precisely assess environmental impacts and generate positive outcomes for wildlife.

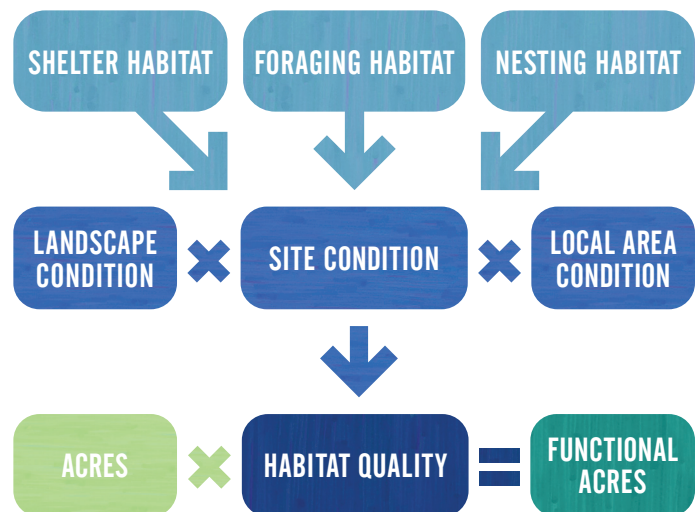
### Key Attributes of the HQT

- **Science-based:** continually factors in the best available science – no guesswork involved
- **Consistent:** provides a common language – functional acres – for all parties
- **Transparent:** provides an objective measure of impacts and benefits everyone can understand – and tracks and reports outcomes to avoid “black box” decision-making
- **Comprehensive:** measures quantity and quality, site- and landscape-scale habitat conditions, and direct and indirect impacts
- **Scalable:** can inform conservation projects from small- to large-scale efforts that cross state borders and jurisdictions
- **Flexible:** adjusts for changes in the landscape over time, such as climate impacts
- **Efficient:** using the HQT requires only the time to conduct a field-site survey and familiarity with biological assessments, Microsoft Excel, and GIS and mapping software, such as Google Earth
- **Aligns with federal standards:** reinforces the mitigation hierarchy by prioritizing avoidance and minimization of impacts, and creating net benefit where offsets are needed
- **Achieves the highest return on investment:** directs conservation dollars – both public and private – to activities and projects that provide the greatest habitat benefit

### Increase Your Project’s Effectiveness

As an appraisal tool, the HQT has the flexibility to bring value and increased transparency to any conservation, restoration or mitigation project. It also serves as the basis for a habitat exchange program that rewards landowners for achieving conservation outcomes rather than following pre-defined practices.

The HQT provides the scientific integrity and streamlined efficiency needed to move projects at a larger scale and faster pace, which benefits every stakeholder involved – especially the species in need.



*What goes into a functional acre?*



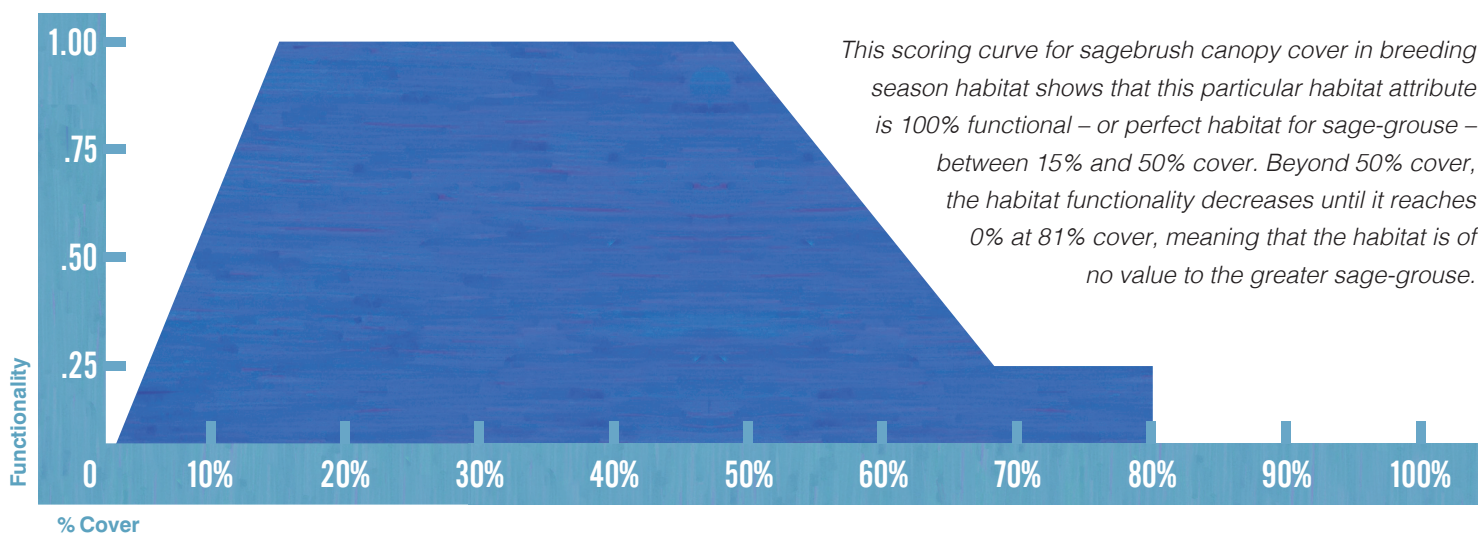
# HABITAT QUANTIFICATION TOOL IN ACTION: GREATER SAGE-GROUSE

*The Habitat Quantification Tool has been customized for the greater sage-grouse to bring more certainty to conservation efforts for the imperiled bird.*

## Customized Conservation

To measure habitat quality for a given plot of land, the HQT accounts for a number of habitat attributes across the full life cycle of the greater sage-grouse, including shelter and foraging habitat as well as various seasonal needs, such as nesting habitat. It also factors in anthropogenic and natural features that the bird avoids, such as energy infrastructure and invasive grass cover. Each habitat feature is measured as a percent of optimal condition (that is, 100% functionality) using a scientifically determined, data-derived scoring curve.

Scores for the different habitat features are used to determine the site condition score, which is then multiplied by local area and landscape condition scores to derive an overall habitat quality score. The habitat quality score is then multiplied by the number of acres in the project area to determine functional acres for the summer, winter and breeding seasons.



## Bringing Solutions to Scale

The HQT accounts for habitat features at multiple scales, from the vegetation conditions at the site, to habitat in the surrounding local area, to the landscape that supports subpopulations, to the entire range of the greater sage-grouse, which spans 11 states.

This multi-scale approach, combined with complete transparency, allows for better information sharing and collaboration across the sagebrush landscape. For example, the HQT can help inform decisions about where to cluster development so it has the smallest impact on the greater sage-grouse. Similarly, it can inform decisions about where to implement conservation projects to achieve the greatest benefits for the greater sage-grouse. This ultimately supports better conservation planning across multiple states and agencies, and prevents fragmented patches of healthy habitat amidst a vast matrix of poor habitat.

## Status of the Greater Sage-Grouse HQT

The greater sage-grouse HQT can be customized to meet the needs and regulatory requirements of individual states. HQTs are currently available in Nevada, Colorado and Wyoming, where they are being used in state-level habitat exchange programs. The HQTs are regularly updated with input from a science advisory committee as new science becomes available.



**PUT THE HQT TO WORK FOR YOUR PROJECTS**

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