



# Explanation of Draft LDRs

## Natural Resource Protection LDRs Update



9/28/18

The Land Development Regulations (LDRs) include regulations that protect natural resources such as wildlife habitat and water quality. In 2012 the Town and County adopted the Comprehensive Plan, which commits to updating the natural resource protections in the LDRs. The update is supposed to balance two goals: better protection of the health of all species native to our area; while also respecting property rights by acknowledging that some natural resources are relatively more valuable than others.

On September 28, 2018, a draft of the updated natural resource protection LDRs was released for public review. The purpose of this document is to summarize the draft, explain why the updated natural resource protection LDRs were drafted the way they were, and identify the implications of the draft LDRs.

### Background

The draft LDRs are informed by the Comprehensive Plan, Focal Species Habitat Mapping for Teton County, WY (Alder, 2017), the Natural Resources Stakeholder Group, and 5 months of community input.

- In late May and early June 2017, the public identified issues regarding natural resource protection through an online survey (220 responses), open house (75 attendees, and in-person community discussions (17 attendees in Spanish, 75 attendees in English).
- On July 18, 2017 the Board of County Commissioners (BCC) committed to answering 10 policy questions in order to inform an update of the natural resource protection LDRs.
- On November 3, 2017 policy options based on those 10 questions were released for public analysis.
- From October 27 to November 12, 2017 the public analyzed the policy options through an online survey (177 responses) and in-person community discussions (26 attendees in Spanish, 41 in English).
- On November 14 and 15, 2017 the Natural Resource Stakeholder Group analyzed and made a recommendation on the policy options.
- On November 15 and 16, 2017 the County Planning Commission analyzed and made a recommendation on the policy options.
- On November 28 and 29, 2017 the BCC provided preliminary direction on the policy options.
- On December 11, 2017 the BCC finalized policy direction to inform the updated natural resource protection LDRs.

The draft natural resource protection LDRs, hearing schedule, and all documents supporting the draft are available on the project website at [www.engage2017.jacksontetonplan.com/naturalresourceprotections](http://www.engage2017.jacksontetonplan.com/naturalresourceprotections).

### Summary

The Comprehensive Plan calls for tiers of habitat protection and habitat analysis based on the relative value of the habitat. Some habitat is important and also abundant – making it no less important, but less *relatively* valuable. Some habitat is important to species that are more adaptable and less dependent on the habitat – making the habitat no less important, but less *relatively* valuable. The difficulty in habitat valuation is staying aware of the landscape level relative value, while making sure the important habitats on an individual site are protected. The updated natural resource regulations address this difficulty by:

- Establishing 3 levels of protection based on a defined Countywide habitat valuation; and
- Establishing a 3-step analysis process that confirms site-specific habitat presence, then confirms habitat valuation when the highest value habitat is found.

### 3 Levels of Protection

#### December 11, 2017 Policy Direction

On December 11, 2017 the BCC provided policy direction to inform the updated natural resource protection LDRs. The summary direction regarding tiers of protection is quoted below, the detailed direction is available on the project website.

- Waterbody, groundwater, and wetland protections should focus on water quality and habitat function (Options 3.A and 3.B). Protection of water quality and habitat function in the context of water dependent recreation should be achieved through a combination of these standards and the limitations on Conditional Uses directed in Question 2 (Option 2.B).
- Use the best available science to permit development in a way that protects sufficient habitat and connectivity to reduce human wildlife conflicts and promote native species resiliency. (Option 1.E+1.B)
- The presence of wildlife habitat on a property should affect the location of allowed development and the allowance for Conditional Uses. The extent of the effect should depend on how valuable the habitat is and the intent of the underlying zoning district; in some instances incentives may be more appropriate than restrictions. (Options 2.A, 2.B, 2.C, and 2.D)
- Impacts to habitat, water, wetlands, and setbacks around water and wetlands should be mitigated. (Options 5.A, 5.B, 5.C, and 5.D)
- Agricultural operations and bona fide habitat restoration should be exempt from all natural resource protection standards including environmental analysis and mitigation. Partial exemptions for other types of development discussed by the Natural Resources Stakeholder Group should be used as direction to inform the tiered system of regulations. (Options 7.D and part of 7.F)
- Natural resource protections should acknowledge existing impacts and allow for by-right expansion that does not increase the existing impact, including intensity of use. There should be some consideration and/or incentive that the expansion be designed to reduce the existing impact when possible, especially related to water quality. (Options 8.A and 8.D)

The Comprehensive Plan calls for water quality protection and tiers of habitat protection that are based on the relative critical value of the habitat, property rights, and the community goals of the underlying zoning. In December 2017, the County built on that direction by prioritizing water quality protection as the most fundamental natural resource protection for the ecosystem and community. It also further defined the criteria to be used in the creation of the tiers of habitat protection.

- The relative valuation should be based on promoting resiliency. Resiliency is the ability to adapt. Protection that promotes resiliency values a scarce habitat over an abundant habitat because loss of the scarce habitat has a greater impact on adaptability than loss of an abundant habitat.
- The relative valuation should be based on the best available science. Ecologically and legally, habitat protection needs to be based on valuation that is peer-reviewed and replicable so that it can be verified and updated.
- The protections should regulate the location of disturbance and intensity of use. The purpose of the rural zoning in the County was to remove as much development potential from habitat areas as the State would allow, unless that development actually improved conservation of open space. What is left for the habitat protections to achieve, is to ensure that the development that is allowed is located to avoid and minimize habitat impact, and to make sure that habitat protections are appropriately considered in the evaluation of conditional uses that are potentially too intense for a zone.
- The relative valuation should consider the intent of the underlying zoning, and the protections should rely on incentives in some cases. There are some zones that are intended to provide housing or

industrial opportunities and allow over 70% of the parcel to be paved. Water quality should still be protected in such zones, but the development allowed to achieve the community’s quality of life values does not leave room for additional habitat protection. If habitat exists in those areas perhaps the zoning should be reevaluated, but the purpose of the habitat regulations is not to trump all of the considerations that went into the creation of the zoning map.



### How do the updated LDRs implement the policy direction?

The updated water quality protections primarily update the waterbody and wetland setbacks. The variability in the current setbacks and resource definitions reduces predictability and water quality protection. The updated protections are clearer and provide greater protection of surface water quality based on water quality and fisheries research.

	Current Setback	Proposed Setback
River	150 ft.	150 ft.
Stream	50-150 ft. depending on riparian vegetation if average annual flow greater than 3 cfs.	30-100 ft. depending on annual, seasonal, or occasional flow
Lake/Pond	50-150 ft. depending on riparian vegetation	50 ft.
Wetland	30 ft.	30 ft.

The updated LDRs establish a placeholder for consideration of migration corridors and stopover areas that are currently being mapped by Wyoming Game and Fish. Migration corridors and stopover areas are highly important to species resiliency, but the science is not available yet. Once it is, the County will have to evaluate whether to incorporate that information into the habitat value index or prioritize it over the habitat value index.

In order to have tiers of habitat protection that are based on habitat value, you have to have a habitat value index. In order to feel confident that base-level protection is appropriate ecosystem stewardship for the lowest value habitat on a site, “low” has to be defined relative to other habitats in the ecosystem. For example, the lowest value area of a riparian parcel still has a much higher value relative to the landscape than the parking lot at the base of Teton Village. The best available, peer-reviewed habitat value index is the Focal Species Habitat Mapping for Teton County, WY (Alder, 2017). It is a weighted sum of 19 species’ habitats that were valued based on “resiliency” factors such as isolation, sensitivity to humans, scarcity, and whether the health of the species is already in decline.

Based on the habitat value index in Focal Species Habitat Mapping for Teton County, WY (Alder, 2017), habitats with the lowest relative value (0-7) are subject to base-level protections. Small parcels and parcels with high intensity zoning are also subject to base level protections, as is redevelopment or expansion within an existing development area. Habitats with medium relative value (8-14) are subject to mid-level protections. Habitats

with high relative value (15-33) are subject to high-level protection. The table below summarizes the protections.

	Base-Level Protection	Mid-Level Protection	High-Level Protection
Applicability	<ul style="list-style-type: none"> <li>• Parcel is in the AC, AR, WC, OP, BP, or PR zone; or</li> <li>• Parcel is 3 acres or less; or</li> <li>• Entire parcel mapped as low value; or</li> <li>• Development area verified as low value; or</li> <li>• Redevelopment expansion of an existing development area</li> </ul>	Base-Level does not apply; and <ul style="list-style-type: none"> <li>• Parcel is 10 acres or less and platted; or</li> <li>• Development area verified as medium value</li> </ul>	Base-Level and Mid-Level do not apply
Location	<ul style="list-style-type: none"> <li>• Waterbody and wetland setbacks apply</li> </ul>	<ul style="list-style-type: none"> <li>• Waterbody and wetland setbacks apply</li> <li>• Development area must be in lowest value habitat</li> </ul>	<ul style="list-style-type: none"> <li>• Waterbody and wetland setbacks apply</li> <li>• Development area must have least possible impact</li> <li>• Only 1 development area is allowed on a parcel</li> </ul>
CUP Consideration	Habitat not the primary consideration	Habitat the primary consideration	Most CUPs prohibited
Other Protection	<ul style="list-style-type: none"> <li>• Wildlife friendly fencing</li> <li>• Wildlife feeding prohibited</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife friendly fencing</li> <li>• Wildlife feeding prohibited</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife friendly fencing</li> <li>• Wildlife feeding prohibited</li> </ul>
Mitigation	Exempt	2:1	2:1
Incentives	TBD	<ul style="list-style-type: none"> <li>• Mitigation exempt if disturbance minimized</li> <li>• Base-level protection applies if no new impact</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigation exempt if disturbance minimized</li> <li>• Base-level protection applies if no new impact</li> </ul>

### What are the implications of the draft LDRs?

The updated waterbody setbacks will increase the stream setback for many streams. The current applicability of the stream setback to streams with an average annual flow of over 3 cubic feet per second (cfs) means that it is not applied to many intermittent and ephemeral streams, nor is it applied to some perennial streams. The proposed perennial stream setback of 100 feet is also an increase in most cases, because in most cases the variable 50-150 foot setback only results in a 50 foot setback. The increased stream setbacks will result in increased water quality protection, but will also create nonconformities. The draft limits the impact of the creation of the nonconformities by allowing nonconforming buildings that cannot expand outside of the new setback to expand within the new setback without a variance as long as the expansion is not any closer to the stream than the existing building and mitigation is provided.

Perennial: Flows year-round  
 Intermittent: Flows seasonally  
 Ephemeral: Flows occasionally

The proposed division between low and medium value habitat on the Focal Species Habitat Mapping for Teton County, WY (Alder, 2017) habitat value index will mean that more parcels will be subject to habitat protections and mitigation for habitat impacts. There are many properties that are larger than 3 acres and outside of complete neighborhood zones (AC, AR, WC, OP, BP, and PR) that will be subject to mid-level or high-level protections under the proposed regulations, but are not subject to the current Natural Resources Overlay (NRO) protections.

An implication of the proposed LDRs is that a landowner who wants to locate development in higher value habitat must put the land under conservation easement. In such a case, the permanent protection provided by the conservation easement is traded for the impact to relatively more valuable habitat.

### 3 Steps of Site-Specific Analysis

#### December 11, 2017 Policy Direction

On December 11, 2017 the BCC provided policy direction to inform the updated natural resource protection LDRs. The summary direction regarding tiers of site-specific analysis is quoted below, the detailed direction is available on the project website.

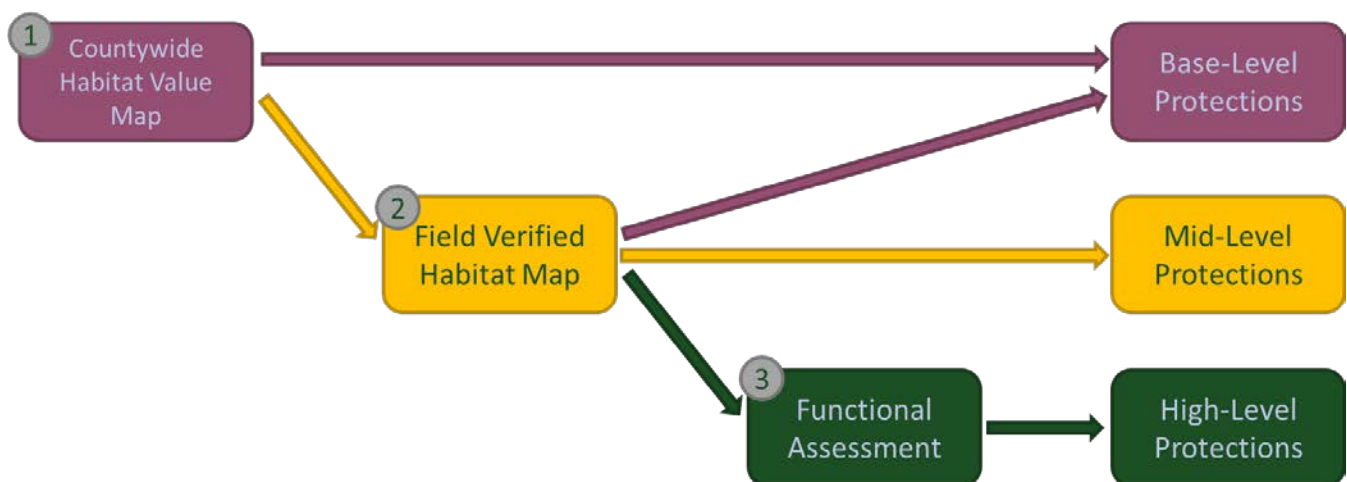
- The Focal Species Habitat Map, and/or other best available science, should be the basis of any evaluation of a site’s natural resources. In addition, a boots-on-the-ground, site-specific study of varying level of detail is needed when multiple habitat values need to be compared, relatively valuable habitat exists, or when a specific natural resource boundary needs to be identified. Site-specific, boots-on-the-ground studies should be as consistent as possible. (Options 4.A, 4.B, and 4.C)
- Agricultural operations and bona fide habitat restoration should be exempt from all natural resource protection standards including environmental analysis and mitigation. (Options 7.D and part of 7.F)

The Comprehensive Plan calls for tiers of site-specific analysis based on the relative critical value of the habitat on the property. In December 2017, the County endorsed the Focal Species Habitat Mapping for Teton County, WY (Alder, 2017) as the basis of those tiers and stated that in some cases that study may be the extent of the habitat analysis that is needed.

The implementation of the December 2017 policy direction was largely informed by a question that is implied within the policy direction itself – What if the Focal Species Habitat Map is wrong? The obvious answer to the question is that the Focal Species Habitat Map should be confirmed or corrected before it is used as the basis for regulations.

#### How do the updated LDRs implement the policy direction?

The proposed regulations are organized as a 3-step process of confirmation and correction to make sure high-value habitat is not mistakenly developed and low-value habitat is not mistakenly protected.



The first step of the analysis is to review the Countywide Habitat Value Map, water maps, Vegetation Map, and Zoning Map that are (or will be) available on the County Geographic Information System (GIS). This step can be done by anyone. If that analysis is enough to determine that base-level protections apply, no further analysis is

necessary and the applicant may submit the development or use application. Base-level protections only apply to those properties that are small, intended for development, or entirely within low-value habitat on the Countywide Habitat Value Map. If higher value habitat may exist anywhere on the property, further analysis is needed to ensure high value habitat is protected.

If additional site-specific analysis is needed, the second step, a Field Verified Habitat Map, is confirms or corrects the habitat maps defined by Focal Species Mapping for Teton County, WY (Alder, 2017). The Focal Species Mapping study identifies focal species habitats and defines their characteristics based on peer-reviewed, expert collaboration. However, the modeling of where those habitats exist is only as accurate as the data on which the models were built. For example, the Vegetation Map (Cogan, 2014) that is the basis for almost all habitat models is less than 90% accurate; as a result the Focal Species Habitat Map can be no more accurate than that. A Field Verified Habitat Map ensures more accurate application of the habitat definitions from Focal Species Mapping for Teton County, WY (Alder, 2017) based on the vegetation that actually exists. If a Field Verified Habitat Map provides enough information to determine that base-level or mid-level protection applies no further study is needed. If only high value habitat exists on the property or the applicant questions the appropriateness of the valuation for the site, additional analysis is needed.

The third and highest level of analysis is a Functional Assessment. A Functional Assessment builds on the Field Verified Habitat Map by overlaying additional habitat considerations, incorporating a vicinity analysis of surrounding habitat, and finally completing a site-specific valuation. The incorporation of additional habitat considerations and site-specific valuation allows for correction of the valuation represented by the Field Verified Habitat Map when the general concepts of Focal Species Mapping for Teton County, WY (Alder, 2017) are not relevant to the specific context of the site. The drawback to site-specific valuation is that it is more subjective and not indexed. As a result any property with a Functional Assessment is subject to high-level protection.

In establishing a 3-step evaluation process the updated natural resource protections provide improved definition of what a habitat inventory should include and what a habitat valuation should consider. The updated LDRs also define the certifications and experience needed to be a qualified professional to complete the second and third levels of analysis. In addition, where subjective analysis is required a qualified staff member or contractor will review the habitat valuation. The improvements will improve the consistency of natural resource protection and reduce the County's reliance on Teton Conservation District and Wyoming Game and Fish expertise in implementation of the LDRs. Outside agencies will still be invited to review and comment on Functional Assessments, but the criteria for evaluation will be much better defined.

### What are the implications of the draft LDRs?

Far more property owners will have to hire an environmental professional. Nearly all properties over 3 acres in the R-1, R-2, R-3, BC, MHP, NC, S, and R-TC zones will have to hire a professional to complete a Field Verified Habitat Map, unless they are redeveloping an already impacted area. Under the current regulations many of these properties are outside of the NRO and/or exempt from an Environmental Analysis (EA) for other reasons. It is difficult to estimate how many properties will also require a Functional Assessment, but based on the Countywide Habitat Value Map fewer properties will require a Functional Assessment than currently require an EA. As a result of the increased analysis, the community will have a more accurate picture of the habitat being impacted by development.

## What is Left to Do?

### December 11, 2017 Policy Direction

On December 11, 2017 the BCC provided policy direction to inform the updated natural resource protection LDRs. The summary direction is quoted below, the detailed direction is available on the project website.

- The County should have a habitat restoration and mitigation bank program, but still prioritize onsite mitigation. The preference is for a third party program that does not require County administration. (Option 6.C)
- Sites classified as “agricultural” by the Assessor that are at least 70 acres should be exempt from wildlife friendly fencing standards. (modified Option 9.A) Create a working group to identify a collaborative approach to allowing continued permeability and migration through development.
- In addition to the existing conservation incentives (PRDs and Floor Area Option), development flexibility should be provided to projects that provide additional natural resource protection. A fund should also be created to pay landowners for preservation and restoration of natural resources. (Options 10.A and 10.B)

While the draft natural resource protection LDRs address much of the County direction from December 2017, they do not address:

- Migration corridor and stopover area protection
- Updates to the wildlife friendly fencing standards
- A habitat restoration and mitigation banking program
- A fund to pay landowners for preservation and restoration of natural resources

Protection of migration corridors and stopover areas should be considered as soon as Wyoming Game and Fish has completed their mapping project. A working group organized by the Jackson Hole Wildlife Foundation is evaluating multiple non-regulatory options for wildlife friendly fencing. A restoration or mitigation bank and fund for restoration or preservation are programs that need further development outside of these LDRs. They make most sense as a program of the Teton County Scenic Preserve Trust, but the TCSPT does not currently have the staff or fiscal resources to develop such programs.

Continuing work on these topics will require the Board of County Commissioners to reprioritize other work planned for 2019 in the adopted Comprehensive Plan Implementation Work Plan.

### Draft LDRs

The above is just a summary of the draft updated natural resource protection LDRs. To review the entire draft, adoption hearing schedule, and all supporting materials please visit [www.engage2017.jacksontetonplan.com/naturalresourceprotections](http://www.engage2017.jacksontetonplan.com/naturalresourceprotections).