



LAND USE AND CONSERVATION



COMMITTEE MEMBERS FOR LAND USE AND CONSERVATION

Sandy Mason, Valley Advocates for Responsible Development, Driggs, ID
Kathy Rinaldi, Valley Advocates for Responsible Development, Driggs, ID
Wesley R. Womack, Womack & Associates, Inc., Jackson, WY
Bill Collins, Collins Planning Associates, Jackson, WY
Arne Jorgensen, Hawtin Jorgensen Architects, Jackson, WY
Chris Saunders, City of Bozeman, Bozeman, MT
Ian S. Tuttle, Valley Advocates for Responsible Development, Victor, ID
Facilitator - Wendy Green Lowe, P2 Solutions, Idaho Falls, ID

INTRODUCTION TO LUC CREDITS

In the preparation of the following credits, the Land Use and Conservation (LUC) Committee focused on how the built environment fits into the Greater Yellowstone region ~ a landscape shaped by incredible environmental diversity, open vistas, strong communities and intimate natural relationships.

The Asset Inventory and “Spirit of Place” prerequisite (see [PPIPPE](#)) is designed to shape the developer’s understanding of the site in context of the surrounding community. This understanding should form the basis for the uniting concepts that will guide project decision making in all the LUC credits.

At the core of the LUC credits is an approach to thinking about development density. This is as an opportunity to recognize those projects that move beyond the recent development pattern that has created a system of disconnected, sprawled developments within the Greater Yellowstone ecosystem. The density credit is structured to reward projects that are designed and located to limit impacts on the defining ecosystem values.



The remaining LUC credits address key development issues unique to, or characteristic of, this high mountain region. Maximum points will be achieved by projects that emphasize long-term preservation of open space, sensitive resources, visual quality, and community well being.

The environmental issues addressed by the LUC credit category include:

- Choosing appropriate sites so that sensitive resources are protected
- Minimizing slope disturbance
- Protections of existing views
- Protection of views of the night sky and nocturnal habitat
- Minimization of risk from natural disasters
- Conservation of land resources and reduced environmental impact through increased density of the built environment
- Restoration of contaminated sites
- Conservation of land into perpetuity

Innovation is encouraged and exemplary performance will be awarded additional points.

LUC CREDIT 1: SENSITIVE RESOURCES

2 POINTS

INTENT

To preserve ecosystem processes, while minimizing cultural and environmental impacts from use and development in the Greater Yellowstone region.

REQUIREMENTS

Do not develop buildings, hardscape, roads, or parking areas on portions of sites that meet any of the following criteria: (2 points)

- Prime farmland as defined by the United States Department of Agriculture in the United States Code of Federal Regulations, Title 7, Volume 6, Parts 400 to 699, Section 657.5 (citation 7CFR657.5).
- Cultural or historic areas, including Native American gravesites, trail rest stops, river accesses etc.
- Previously undeveloped land whose elevation is lower than 2 feet above the elevation of the 100-year flood as defined by FEMA.
- Previously undeveloped land which is specifically identified as habitat for any species on Federal or State threatened, endangered, or species of concern lists.
- Within 100 feet of any wetlands as defined by United States Code of Federal Regulations 40 CFR, Parts 230-233 and Part 22, and isolated wetlands or areas of special concern identified by state or local rule, OR within setback distances from wetlands prescribed in state or local regulations, as defined by local or state rule or law. On a previously undeveloped site, the setback should be whichever is more stringent. On an infill site, the local or state rule or law shall be the required setback.



- Previously undeveloped land that is within a minimum of 100 feet from all natural jurisdictional bodies of water OR within setback distances prescribed in state or local regulations, as defined by state rule or law, whichever is more stringent.
- Land which prior to acquisition for the project was public land, unless land of equal or greater value (as defined by public landowner) as public land is accepted in trade by the project landowner. It is the intent of this criterion that the public landowner has valued and identified the potential trade parcel as appropriate. Any public access points existing prior to a trade shall remain.

LUC CREDIT 2: SLOPES

1 POINT

INTENT

To minimize disturbance, erosion of steep slopes, and changes in grade; reduce habitat impacts, cleared area and cut and fill volume; and diminish fire and earthquake danger.

REQUIREMENTS

Build on sites that have no slopes greater than 25%. (1 point)

OR

On **previously developed sites** with slopes greater than 25%.

- Treat any fractions of the site that have not been **previously developed** by complying with the requirements for sites that are not previously developed as set forth below; (1 point)

Reduce disturbance and erosion by:

- Green design and construction to reduce cut and fill volume
- Using mechanically stabilized earth, soil nails, or other retention systems to reduce cut and fill volume of roads, parking lots, and graded areas, as well as resist erosion
- Using best available control technology for erosion control
- Restoring slopes with native or adapted vegetation

Apply creative evaluation and technology by:

- Geological analysis to facilitate development on slope segments that are less vulnerable to erosion and slope instability, and are capable of standing at steeper angles (e.g., resistant bedrock)
- In rare instances, tunneling
- Biological evaluation to reduce habitat impact (e.g., some slope segments may have vegetation that is less attractive to wildlife)
- No flat topping of hillsides.

Note: Some codes and guidelines suggest setbacks from top and toe of steep slopes. It is typical to avoid construction within 50 feet of the top of the slope, and 75 feet from the toe of the slope. These values may be revised by geotechnical evaluation of slope stability.



LUC CREDIT 3.1: VIEWS: VISUAL QUALITY
1 POINT

INTENT

To minimize the impacts of development on existing viewsapes.

REQUIREMENTS

All Projects:

- Off-site signage or billboards are prohibited. (Directional signs that comply with local signage regulations during initial construction are acceptable).
- No sign may be backlit. Any lighting must comply with the Night Sky (LUC 3.2) requirements.
- No temporary signage is permitted in place for more than 30 days. (Signs during construction process are excluded.)
- If signs are present, comply with local design guidelines or regulations.
- Incorporate cell or communication towers or devices into the built environment or locate so that they are not visible from off-site within 1.5 miles.

AND

Previously Undeveloped Sites:

- Locate development so that it is not on a ridgeline or hill that may protrude into the skyline when viewed from a federal, state or county road within 2 miles. Place development so when viewed against forests or vegetative hillsides it is camouflaged.
- Forestry and Vegetative Communities - Provide documented evidence that clearing and grubbing efforts completed during site development are a long term betterment to existing ecosystem and done in a manner to mimic the natural patterns of relative communities (i.e., tree farm federal program, mitigation, defensible space to area, etc.)
- Balance of materials on site - Development that does not require additional landform created or displaced beyond the boundaries of property.
- Choose exterior finish materials of colors that are the same color tones or complement the surrounding environment.

LUC CREDIT 3.2: VIEWS: NIGHT SKY
1 POINT

INTENT

To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments.

REQUIREMENTS

Comply with local night sky ordinances or the following: (whichever is more stringent)

For Interior Lighting:



The angle of maximum candela from each interior luminaire as located in the building shall intersect opaque building interior surfaces and not exit out through the windows.

OR

All non-emergency interior lighting shall be automatically controlled to turn off during daylight and non-business hours. Provide manual override capability for after hours use.

AND

For Exterior Lighting:

Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004, Exterior Lighting Section, without amendments. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone:

LZ1 – Dark (Park and Rural Settings)

Design exterior lighting so that all site and building-mounted luminaries produce a maximum initial luminance value no greater than 0.01 horizontal and vertical foot-candles at the site boundary and beyond. Document that 0% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down).

LZ2 – Low (Residential areas)

Design exterior lighting so that all site and building mounted luminaries produce a maximum initial luminance value no greater than 0.10 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 10 feet beyond the site boundary. Document that no more than 2% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down).

For site boundaries that abut public rights-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.

LZ3 – Medium (Commercial/Industrial, High-Density Residential)

Design exterior lighting so that all site and building mounted luminaries produce a maximum initial luminance value no greater than 0.20 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site. Document that no more than 5% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down). For site boundaries that abut public rights-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.

LUC Credit 3.2: Views: Night Sky (continued)

LZ4 – High (Major City Centers, Entertainment Districts)

Design exterior lighting so that all site and building mounted luminaries produce a maximum initial luminance value no greater than 0.60 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site. Document that no more than 10% of the total initial designed site lumens are emitted at an angle of 90 degrees or higher from nadir (straight down). For site boundaries that abut public rights-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.



LUC CREDIT 4: DEFENSIBLE SPACE

1 POINT

INTENT

To minimize risk of damage from natural hazards such as floods, avalanches, fires, landslides, and earthquakes by approved design and construction techniques.

REQUIREMENTS

Perform flood hazard, wind, earthquake, fire, geological and avalanche risk assessments in accordance with local, state, or federal regulations prior to selection of any development site.

AND

Fully comply with all applicable elements of the **most recent edition of the international building codes adopted by the state or local jurisdiction**. If no building code has been adopted, comply with the most recently published edition published by the International Code Council, www.iccsafe.org

AND

Select site locations for development in areas out of the aforementioned hazards. **(1 point)**

OR

Provide mitigation measures that overcome aforementioned hazards. **(1 point)**

LUC CREDIT 5: DENSITY AND OPEN SPACE

2 -4 POINTS

INTENT

To encourage development within existing communities and developed places, to preserve open space and to reduce multiple environmental harms associated with sprawl.

REQUIREMENTS

Design and build the project to achieve the average densities of dwelling units (DU) and/or non-residential floor area ratios (FAR) per buildable land shown below:

Residential areas:

DU	FAR	Points
6 to 10 DU/acre	.50 to .80 FAR	1 point
11 to 18 DU/acre	.80 to 1.0 FAR	2 points
>18 DU/acre	1.0 to 1.35 FAR	3 points

OR

Commercial/Industrial, Multi-use, High-Density Residential:



DU	FAR	Points
10 to 18 DU/acre	.80 to 1.0 FAR	1 point
19 to 28 DU/acre	1.0 to 1.35 FAR	2 points
>28 DU/acre	1.35 to 2.0 FAR	3 points

OR

For Non-Residential uses:

Design and build the project using a plan that could accommodate a change of use. Develop concept master plans that layout several alternate uses, i.e., residential units above parking areas, office use in retail space and/or retail use of ground floor residential space. Structure plating and covenant documents to provide for a reasonable review of such changes. **(1 point)**

AND

If within a municipality, locate the project in either of the following locations:

- An infill site
- A previously developed site

OR

If the development is outside of a municipality or areas at the minimum densities referenced above, develop the project using the following limitations **(1 point)**

Location		Minimum Open Space reserved for future development with appropriate opportunities for extension of development infrastructure
Distance from City Limits	0 - 0.5 miles	20%
	>0.5 - 2 miles	45%
	>2 - 3 miles	50%
	>3 miles	70%



LUC CREDIT 6: BROWNFIELD RESTORATION
1 POINT

INTENT

To reduce pressure on undeveloped land by encouraging the reuse of sites where development must remediate previous environmental contamination.

REQUIREMENTS

Locate project on a site, part or all of which is documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program).

OR

On a site defined as brownfield by a local, state or federal government agency.

AND

Remediate site contamination such that the controlling public authority approves the protective measures and/or clean-up as effective, safe, and appropriate for the future use of the site.

Note: EPA Superfund Brownfield sites in areas identified by state level equivalent programs to those listed above will also qualify.

LUC CREDIT 7: LAND CONSERVATION
1 - 2 POINTS

INTENT

To preserve in perpetuity undeveloped lands that have important natural or cultural resources.

REQUIREMENTS

Protect critical habitat and sensitive vegetative areas in perpetuity by easement or deed restriction.

For all sites:

Ensure protection of the land from development in perpetuity. The land must be within 30 miles of the project and must be identified by a local, state, or national government as important for conservation for natural or cultural purposes. Land for this credit may not be used as mitigation required by law.

AND

For previously undeveloped rural sites:

Acquire fee title or conservation easements on off-site land that is equal to or larger than 75% of the area of the project or 30 acres, whichever is larger. **(1 point)**

OR

Acquire fee title or conservation easements on on-site land that is equal to or larger than 50% of the area of the project or 30 acres, whichever is larger. Area covered by this point is not to be contained within individual ownership lots. **(1 point)**

AND/OR FOR AN ADDITIONAL POINT



Transfer development rights from off-site property to conserve land and increase density of project. Acquire fee title or conservation easements on off-site land that removes development potential of at least 30% of the units. It is encouraged to use the removed development to increase density on proposed site. If present, local land regulatory agencies must accept the location of the off-site land and the effective voluntary transfer of development potential. **(1 point)**