



UPLAND PLANTING GUIDE

GRANTS FOR GRASS · TIER 2

Properties outside the immediate riparian corridor within the Big Wood watershed. Projects focus on converting turf and high-water-use ornamentals to native, drought-tolerant species — reducing irrigation demand, improving soil infiltration, and supporting upland ecology.



WHAT IS THIS GUIDE?

This guide is designed for landowners and community members whose properties lie outside the river corridor but within the Big Wood watershed — on upland slopes, in established neighborhoods, or in the broader valley. It provides a focused framework for selecting, installing, and maintaining native plants adapted to dry, well-drained conditions.

WHO SHOULD USE IT?

Use this guide if your property:

- Is located outside the riparian corridor
- Has turf, ornamental plantings, or non-native ground cover you want to replace
- Has been approved for a Grants for Grass Tier 2 award
- Is on an upland slope or in a neighborhood contributing runoff to local drainages

PURPOSE & OVERVIEW

Upland properties throughout the Big Wood watershed contribute meaningfully to river health — even miles from the water's edge. Turf grass and non-native ornamentals impose significant irrigation demand on a fully appropriated river, generate fertilizer and pesticide runoff, and prevent rainwater from soaking into the ground. Converting these landscapes to native, drought-tolerant species reduces outdoor water use, improves soil infiltration, and creates a mosaic of habitat that supports pollinators, birds, and the broader ecological community.

Upland plantings — native species established in dry, well-drained settings — are among the most scalable conservation actions a landowner can take. A single converted yard may appear modest in isolation, but across a neighborhood or watershed, the cumulative effect on water savings, runoff reduction, and pollinator connectivity is substantial.

This guide focuses on the native plants best suited to Tier 2 Upland conditions: areas with dry to moderately moist soils, full sun to partial shade, and minimal or seasonal irrigation after establishment.

What Makes Upland Sites Distinct

Upland properties in Blaine County range from open sagebrush-steppe slopes to established neighborhood lots. They share key characteristics: lower and more variable soil moisture, greater sun exposure, and direct exposure to the wildland-urban interface. Plants here must be genuinely drought-adapted — not merely drought-tolerant — to thrive without supplemental irrigation beyond the first two seasons.

Soil conditions vary considerably across upland sites. Rocky, well-drained soils are common on slopes; compacted, amended soils are typical on established lots. Site assessment before planting is essential — the right plant in the right place is the single most important factor in long-term success.

ECOLOGICAL GOALS

- Reduce irrigation demand on a fully appropriated river system
- Increase infiltration and reduce runoff to local tributaries
- Replace turf with native plant communities adapted to regional conditions
- Reduce fertilizer and pesticide runoff entering the watershed
- Improve soil health and structure through deep-rooted native species
- Support upland pollinators, ground-nesting birds, and native insects
- Provide year-round wildlife habitat through layered shrub-steppe communities
- Demonstrate community-scale conservation and inspire neighborhood action

UPLAND AREA OF WORK BEFORE YOU PLANT

Remove Invasives First

Cheatgrass is the dominant invasive threat in upland Blaine County settings. Once established, it out-competes native seedlings for early-season moisture and dramatically increases fire risk. Remove it — and any other invasive species — before or alongside your native planting effort.

Priority noxious weeds for upland sites in Blaine County:

- Cheatgrass (*Bromus tectorum*)
- Canada thistle (*Cirsium arvense*)
- Scotch thistle (*Onopordum acanthium*)
- Knotweed (*Polygonum* spp.)

Contact Idaho Invasive Species Council (idahoinvasives.org) or the Blaine County Noxious Weed Department for identification and management guidance. Noxious weed control may be required by law on some properties.

Call 811 Before You Dig

Always call 811 to locate underground utilities before any digging or excavation.

Assess Your Site

- Sun exposure — map full sun (6+ hrs), partial sun, and shade throughout the day.
- Slope and aspect — south-facing slopes are hotter and drier; north-facing slopes hold more moisture.
- Soil type — sandy or gravelly soils drain fast; test if uncertain. Native plants generally prefer existing conditions over amended soil.
- Existing plants — identify any natives already present — retain them and use them as site indicators.
- Prior land use — disturbed or filled soils, compacted areas, or former turf may have deep weed seed banks.

Timing

Fall planting is preferred. Cooler temperatures and seasonal precipitation allow roots to establish before summer heat. Early spring is a good alternative. Avoid peak summer heat unless consistent irrigation is available. Upland sites require particular care in summer — new plants in dry, exposed conditions without irrigation will not survive peak July–August heat.

PLANTING BEST PRACTICES

Site Preparation

- Remove all invasive weeds before planting, especially Russian olive and tamarisk
- Sheet mulch with cardboard + 3" wood chips to suppress weeds without tilling
- Avoid deep tilling – it disturbs soil structure and brings weed seeds to the surface
- For large areas of turf removal, a sod cutter is efficient and minimizes soil disruption
- Lightly loosen compacted soils in planting holes only

Planting Technique

- Dig hole as deep as the root ball and 1.5–2× as wide. Gently loosen circling or compacted roots before placing
- Set the top of the root ball at or slightly above the surrounding soil level
- Backfill with native soil – avoid excessive amendments
- Tamp lightly to remove air pockets, then water deeply
- Apply 2–3" of mulch after planting; keep mulch away from stems

Spacing & Design

- Plant in clusters of the same species – groups of 3–5 minimum
- Repeat species groupings to create rhythm and habitat patches
- Layer plants by height: large trees at the back, shrubs mid-slope, grasses and forbs at the water's edge
- Match spacing to mature plant size – overcrowding leads to competition and disease
- Anchor designs with 2–3 dominant keystone species, then fill with supporting species

Establishment Watering

- Water deeply and infrequently to encourage deep root development
- First growing season: water every 7–10 days in summer; reduce in fall
- Second year: reduce to occasional deep watering; let natural precipitation carry more load
- After year 2: most riverine natives require no supplemental irrigation
- Drip irrigation is recommended – it's efficient and reduces weed pressure
- Avoid overhead sprinklers where possible

Long-Term Care at a Glance

Year 1–2: Establish

- Water consistently; weed frequently
- Replace any plants that fail to establish
- Replenish mulch as needed
- Monitor for invasive regrowth

Year 3+: Maintain

- Reduce or eliminate irrigation
- Cut back perennials in late winter
- Leave seed heads and stems through fall and winter for wildlife
- Allow natural reseeding where appropriate

Ongoing Weed Management

Cheatgrass and other invasives are the most common challenge in upland native plantings. Consistent attention in years 1–3 is essential.

- Prioritize removal before weeds go to seed — one cheatgrass plant can produce hundreds of seeds
- Focus on invasive and noxious species first
- Hand-pulling is preferred over broad herbicide use near native plantings
- As native plants mature and fill in, they will naturally suppress many weeds

Wildlife-Friendly Maintenance

Leave some stems, seed heads, and leaf litter in place through fall and winter — these provide critical overwintering habitat for native insects, birds, and small mammals. Avoid removing all plant material at once.

Minimize pesticide use in and around upland plantings. Native bees nesting in the soil and hollow stems are especially vulnerable to broad-spectrum applications.

12 KEYSTONE SPECIES FOR THE UPLAND ZONE

Keystone species are native plants that support a disproportionately large share of the food web. They are the foundation of any successful upland planting — choose them first, then build supporting plant communities around them. All species below are native to the Big Wood watershed.

01. Big Sagebrush

Artemisia tridentata ssp. *tridentata*

Role: Foundation shrub, 3–8 ft; aromatic silver-gray foliage; the defining plant of Idaho's upland landscape.

Wildlife value: Essential winter browse for pronghorn, mule deer, and sage grouse; seeds support songbirds year-round; aromatic oils deter many browsing pests.

Why keystone: Defines the entire sagebrush-steppe ecosystem — dozens of wildlife species are physiologically dependent on it for survival.

Planting note: Plant in well-drained, dry sites only; do not amend soil. Very slow from seed; use containerized plants. Avoid clay or seasonally wet soils.



02. Antelope Bitterbrush

Purshia tridentata

Role: Upright shrub, 3–6 ft; small yellow flowers in spring; three-lobed leaves; persistent through winter.

Wildlife value: Critical year-round browse for deer and elk; seeds cached by small mammals; nitrogen-fixer that improves surrounding soil.

Why keystone: Fixes atmospheric nitrogen, improving soil health while feeding the food web — a rare combination of ecological services in a single shrub.

Planting note: Does not transplant well from the wild; use containerized stock. Drought-tolerant once established. Avoid overwatering.



03. Saskatoon Serviceberry

Amelanchier alnifolia

Role: Multi-stem shrub or small tree, 6–20 ft; masses of white spring flowers; blue-black fruit in summer.

Wildlife value: Berries consumed by over 50 bird species; one of the most important spring pollinator shrubs in the watershed.

Why keystone: Among the highest-value wildlife shrubs in Idaho — provides abundant fruit in early summer when few other natives are fruiting.

Planting note: Adaptable to well-drained soils; tolerates part shade. Spreads by suckering — useful for slope stabilization. Fall or early spring planting preferred.



04. Chokecherry

Prunus virginiana var. *melanocarpa*

Role: Tall shrub to small tree, 10–25 ft; fragrant white flower clusters in spring; dark red to black fruit.

Wildlife value: Extremely high fruit value for birds, bears, and small mammals; larval host for numerous butterfly species.

Why keystone: Among the most wildlife-valuable shrubs in the watershed — fruit is nutritionally dense, widely consumed, and produced in abundance.

Planting note: Spreads by suckering; effective on slopes. Tolerates a wide range of soils. Prune to shape or maintain as multi-stem form.



05. Rubber Rabbitbrush

Ericameria nauseosa

Role: Mounding shrub, 2–5 ft; silver-green aromatic foliage; brilliant golden-yellow flowers in late summer through fall.

Wildlife value: Critical late-season nectar source when most natives have finished blooming; seeds support finches through winter.

Why keystone: Fills an irreplaceable late-season bloom window — the last major native nectar source before winter, supporting migrating monarchs and late pollinators.

Planting note: Plant cuttings directly into moist bank soils for fastest establishment.

06. Skunkbush Sumac

Rhus trilobata var. *trilobata*

Role: Dense shrub, 3–6 ft; small yellow spring flowers; red berries; brilliant orange-red fall color. Firewise rated.

Wildlife value: Berries eaten by birds through winter; excellent browse for deer. Fire-resistant structure reduces fine fuel loads in the WUI.

Why keystone: Combines wildlife value, erosion control, fall color, and fire resistance in one plant — an exceptional multi-benefit native for upland settings.

Planting note: Extremely drought-tolerant. Spreads by root suckering on slopes. Excellent Firewise selection. Tolerates shallow, rocky soils.

12 KEYSTONE SPECIES FOR THE UPLAND ZONE

07. Common Snowberry

Symphoricarpos albus

Role: Upright shrub, 3–5 ft; small pink flowers in early summer; persistent white berry clusters through winter.

Wildlife value: White berries are critical winter food for birds including waxwings and robins; heavily browsed by deer and elk.

Why keystone: Adapts to the widest range of conditions of any native shrub in the region — sun to shade, wet to dry — making it indispensable in any upland design.

Planting note: Spreads by suckering; excellent groundcover under trees or on shaded slopes. Tolerates poor soils and compaction.



08. Bluebunch Wheatgrass

Pseudoroegneria spicata

Role: Bunchgrass, 2–3 ft; blue-green upright leaves; tall seed heads persist through fall. Idaho's signature upland grass.

Wildlife value: Seeds consumed by birds and small mammals; dense root systems support soil invertebrate communities.

Why keystone: The defining bunchgrass of Great Basin uplands — an indicator species of ecological health and the structural matrix of native plant communities.

Planting note: Best established from seed in fall. Slow to establish but highly persistent once rooted. Do not overwater. Avoid competition from weeds in year one.



09. Idaho Fescue

Festuca idahoensis

Role: Fine-textured bunchgrass, 12–24 in; soft blue-green clumping foliage; delicate seed heads in summer.

Wildlife value: Ground-nesting bird cover; small mammal habitat; supports soil invertebrates in root zone.

Why keystone: The refined companion to bluebunch wheatgrass — together they form the structural matrix of healthy upland plant communities across the watershed.

Planting note: Drought-tolerant; excellent on dry, partly shaded sites under shrubs. Use native-sourced species form, not horticultural cultivars.



10. Sulphur-flower Buckwheat

Eriogonum umbellatum

Role: Low perennial, 6–24 in; bright yellow flower clusters spring through summer; persistent seed heads into fall.

Wildlife value: One of the most important pollinator plants in the sagebrush-steppe; larval host plant for several blue and hairstreak butterfly species.

Why keystone: Supports an exceptional diversity of specialist native bees and butterflies — many species depend exclusively on buckwheat for reproduction.

Planting note: Long-lived in rocky, dry, well-drained soils. Avoid clay or wet sites. Excellent in exposed slopes and gravelly areas. Very drought-tolerant once established.



11. Sticky Geranium

Geranium viscosissimum

Role: Flowering perennial, 18–30 in; pink flowers; slightly sticky, deeply lobed foliage turns red in fall.

Wildlife value: Excellent mid-season nectar source for native bees and bumblebees. Foliage browsed by deer as palatable upland forage.

Why keystone: Provides mid-season bloom continuity between spring shrubs and late-summer rabbitbrush — a critical bridge for native bee communities.

Planting note: Establishes in a range of well-drained upland soils; tolerates partial shade. Good companion plant under shrubs. Fall planting preferred.

12. Lewis' Flax

Linum lewisii

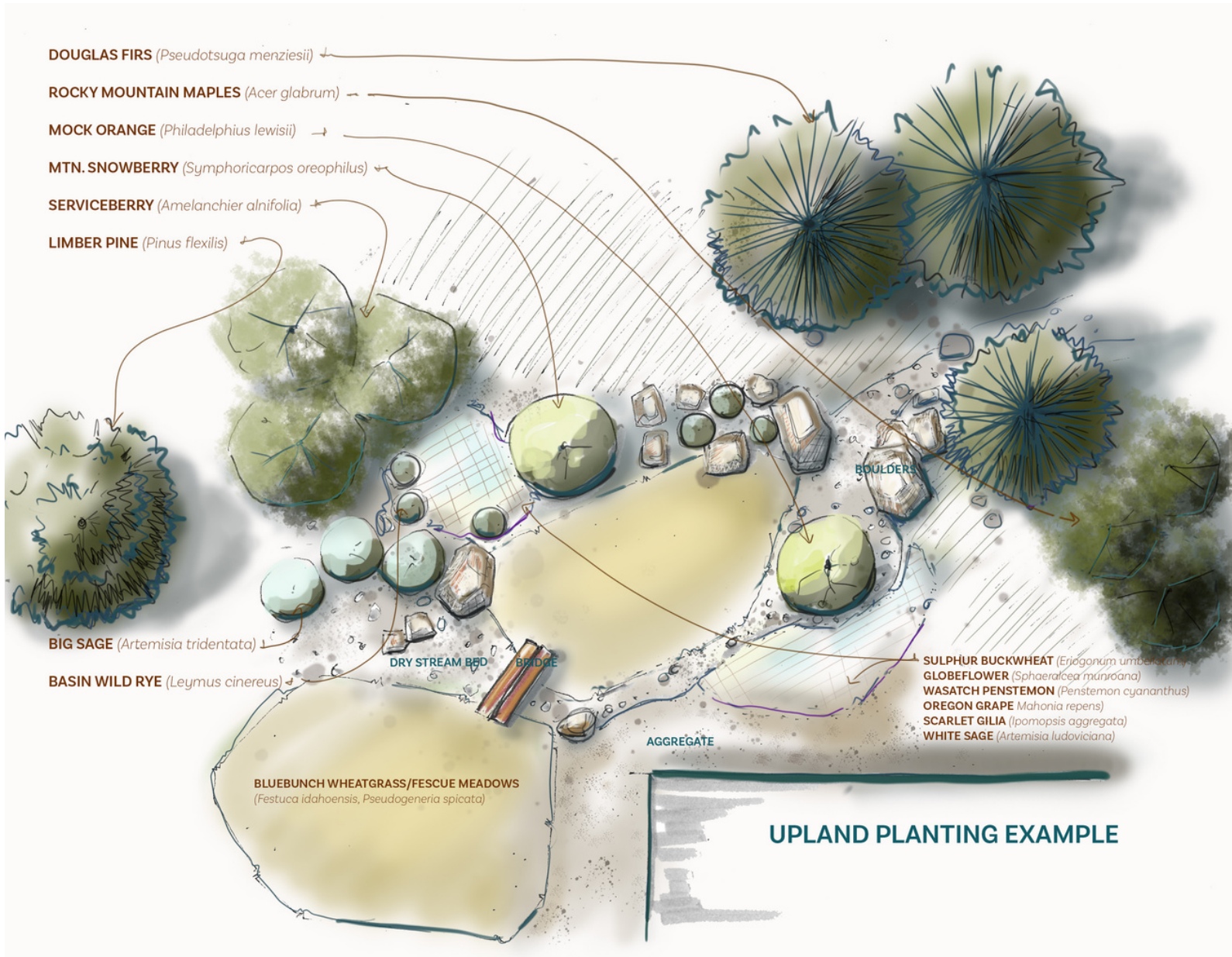
Role: Slender perennial, 12–24 in; sky-blue flowers with white centers throughout summer; airy, fine-textured foliage.

Wildlife value: Continuous summer bloom provides consistent nectar through the hottest part of the season; seeds consumed by small birds and insects.

Why keystone: Provides sustained bloom through summer heat when few other dry-site natives flower — critical for native bees in exposed upland settings.

Planting note: Best seeded directly in fall. Very drought-tolerant. Short-lived but reseeds readily where conditions suit. An excellent gap-filler.

UPLAND PLANTING DESIGN EXAMPLE



POLLINATOR GARDEN FOR THE UPLAND ZONE

Even within a primarily shrub-steppe restoration planting, a dedicated pollinator zone — as small as 100–200 square feet — dramatically increases the ecological value of your site. Use the plants below to create a continuous bloom sequence from early spring through late fall.

SPRING BLOOM (APRIL – MAY)

Golden Currant (*Ribes aureum*)

One of the first to flower each spring. Fragrant yellow blooms provide pollen and nectar at a critical time for overwintered bees and early hummingbirds.

Creeping Oregon Grape (*Mahonia repens*)

Yellow flower clusters in early spring provide early nectar for queen bumblebees. Evergreen, deer-resistant, and effective groundcover under taller shrubs.

MIDSUMMER BLOOM (JULY – AUGUST)

Lewis' Flax (*Linum lewisii*)

Sky-blue flowers provide consistent nectar throughout the hottest part of the season when few other dry-site natives sustain bloom. Reseeds readily in open soil.

Nettleleaf Giant Hyssop (*Agastache urticifolia*)

Tall spikes of pink to lavender flowers in summer. Exceptional pollinator plant visited by hummingbirds, native bees, and butterflies.

Sulphur-flower Buckwheat (*Eriogonum umbellatum*)

Bright yellow flower clusters from late spring into midsummer. One of the most important pollinator plants in the sagebrush-steppe — supports dozens of specialist native bee species.

EARLY SUMMER BLOOM (JUNE – JULY)

Scarlet Gilia (*Ipomopsis aggregata*)

Striking red tubular flowers in early summer. A hummingbird magnet and excellent native bee plant. Biennial — plant in clusters and allow reseeding.

Sticky Geranium (*Geranium viscosissimum*)

Pink to carmine flowers provide excellent mid-season nectar for native bees and bumblebees. Adds forb diversity within shrub-dominated plantings.

EARLY SUMMER BLOOM (JUNE – JULY)

Rubber Rabbitbrush (*Ericameria nauseosa*)

Golden-yellow flowers in late summer through early fall, when almost no other natives are blooming. Critical for migrating monarchs and late-season native bees.

Yarrow (*Achillea millifolium*)

White to pale pink flat-topped flower clusters from summer into fall. Supports an exceptional diversity of native insects. Extremely drought-tolerant and adaptable.

Design Tip

Plant pollinator species in clusters of 5–7 or more. A single plant has minimal impact; a patch of gilia or buckwheat is visible from a distance, attracts more insects, and holds them longer.

Resources & Support

Apply for a Grants for Grass Award

projectbigwood.org/apply

Invasive Species of Idaho

idahoinvasives.org

Blaine County Noxious Weed Department

<https://www.blainecountyid.gov/225/Noxious-Weeds>

Idaho Native Plant Society

idahonativeplants.org

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Local Native Plant Nurseries

Webb Landscape & Nursery – Bellevue, ID · webbland.com

North Fork Native Plants – Rexburg, ID ·

northforknativeplants.com

Draggin' Wing High Desert Nursery – Boise, ID ·

waterthriftyplants.com

Great Bear Native Plants – Corvallis, MT ·

greatbearnativeplants.com

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