

PLANNING BMP's

Share/consolidate corridors for pipeline ROWs to the maximum extent possible.

Maximize the utility of surface facilities by developing multiple wells from a single pad (directional drilling), and by co-locating multipurpose facilities (for example, well pads and compressors) to avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.

Minimize newly planned activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river.

Locate roads outside of drainages where possible and outside of riparian habitat.

Minimize the number, length, and footprint of oil and gas development roads

Use existing roads where possible

Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors

Combine and share roads to minimize habitat fragmentation

Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development

Place roads to avoid obstructions to migratory routes for wildlife, and to avoid displacement of wildlife from public to private lands.

Design roads with visual and auditory buffers or screens (e.g., topographic barriers, vegetation, and distance).

Maximize the use of directional drilling to minimize habitat loss/fragmentation

Maximize use of remote completion/frac operations to minimize traffic

Maximize use of remote telemetry for well monitoring to minimize traffic

Phase and concentrate development activities, so that large areas of undisturbed habitat for wildlife remain.

Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction, drilling, and production.

Minimize the duration of development and avoid repeated or chronic disturbance of developed areas. Complete all anticipated drilling within a phased, concentrated, development area during a single, uninterrupted time period.

CONSTRUCTION BMP's

Close and reclaim roads not necessary for development, including removing all bridges and culverts and recontouring/reclaiming all stream crossings.

Structures for perennial or intermittent stream channel crossings should be constructed using appropriately sized bridges or culverts

Design road crossings of streams to allow fish passage at all flows and to minimize the generation of sediment.

Design road crossings of streams at right angles to all riparian corridors and streams to minimize the area of disturbance to the extent possible.

DRILLING/COMPLETIONS BMP's

Use centralized hydraulic fracturing operations.

Install and maintain adequate measures to exclude all types of wildlife (e.g., big game, birds, and small rodents) from all fluid pits (e.g., fencing, netting, and other appropriate exclusion measures).

Conduct well completions with drilling operations to limit the number of rig moves and traffic.

PRODUCTION/RECLAMATION BMP's

Restore both form and function of impacted wetlands and riparian areas and mitigate erosion.

Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements

Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife

WPX Energy will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.

Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.

Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.

Avoid dust suppression activities within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river where possible.

Bore pipelines that cross perennial streams