

→ For Your Information

Visual resources are the physical features that make up the visible landscape, including land, water, vegetative, and man-made elements (Guidance Material, USDOT, undated).

The study area is defined as areas within 5 miles of the line segments that contain residences, recreational areas, public lands, and highways, and have a visual connection to the line segment.

Viewer Characteristics

Low Visual Sensitivity: most motorists, who would see transmission lines at limited locations from roads that they traverse.

Moderate Visual Sensitivity: Some recreationalists, such as bird watchers, hikers and/or recreationalists whose activity is specific to a finite geographic location, who are sensitive to man-made structures and their impact on the view of the natural environment.

High Visual Sensitivity: Residential viewers who own property within 500 ft of the proposed corridors and are concerned about transmission structures and how they impact the view of the natural environment.

Foreground views are those within 0.25 to 0.5 mile of the viewer.

3.9 Visual Resources

Typically, **visual resources** are more conceptual, esoteric, and open to wider interpretation than other resources. They include the scenery and landscapes that, due to their natural features or relatively undisturbed state, have “outstanding or remarkable value” to the general public. Examples of scenic resources could include outstanding natural features, dramatic vantage points, or pristine landscapes (*Hanford Reach Interim Action Plan, August 28, 1998*).

The study area’s visual character and quality are primarily natural and rural, defined by rolling as well as steep and dramatic mountain ranges, consistent stretches of sagebrush and rabbitbrush, and agricultural uses including orchards, vineyards and ranches. Its visual character and quality are also defined by dispersed residential areas, existing transmission and generation facilities, the natural beauty of the Columbia River, and the way topography and vegetation relate to the sky and the changing patterns of light throughout the day and year. All of these factors contribute to the area’s visual interest and perceived visual quality.

The visual resources for each segment are described below. Visually Sensitive Viewpoint locations are shown on Map 10, *Visual Analysis*, as well as the location of visual simulations.

3.9.1 Visually Sensitive Viewpoints

Four locations that are visually sensitive have been identified due to their visual quality, uniqueness, cultural significance, or **viewer characteristics**. These areas include:

- **Viewpoint A**, the area near Colockum Pass, due to the number of residences with **foreground** views of the transmission line project;
- **Viewpoint B**, the north face of the Saddle Mountains near the Columbia River and Crab Creek, due to its unique and striking landform, relationship to adjacent water bodies and number of viewers on Route 243;
- **Viewpoint C**, the Saddle Mountain Ridgeline, due to its striking landform, recreational value, and potential impact from a ridgeline transmission line corridor placement; and
- **Viewpoint D**, the Vernita Bridge and Primitive Boat Launch Area, due to the number of recreationalists and potentially sensitive viewers, and the presence of natural water bodies and dramatic landforms.

3.9.1.1 Viewpoint A, Colockum Pass

Segment A passes close to a number of residences that have expressed concerns about the visual impact of the project. Viewers would mainly be residents and visitors to the cabins nearby.



Photo 3.9-1. Looking northeast and east along Gage Road towards Colockum Road (Viewpoint A)

3.9.1.2 Viewpoint B, North Face of Saddle Mountains

In this area, Segments D, E, and F would cross natural water bodies and scale the north face of this dramatic, natural landform. These three segments would be clearly visible (primarily in the ***middleground***) to many viewers including residents, tourists, and recreationalists traveling through the area.

➔ For Your Information

The ***middleground*** is from the foreground to about 5 miles from the viewer.

Photo 3.9-1 has been simulated in Chapter 4, *Environmental Consequences*, to show a new transmission line. See Photo 4.8-2.

Photo 3.9-2 has been simulated in Chapter 4, *Environmental Consequences*, to show a new transmission line. See Photos 4.8-4.



Photo 3.9-2. Looking east to Saddle Mountains from Highway 243 (Viewpoint B)

3.9.1.3 Viewpoint C, Saddle Mountain Ridgeline

Due to its striking landform and recreational value, the Saddle Mountain Ridgeline along Segment F is considered a visually sensitive resource. The high quality of the visual environment is due to the dramatic landform and proximity to Columbia River and Crab Creek,

as well as the number of viewers on SR 243, and the presence of residential and tourist viewers in the area. Viewers would mainly be motorists, residents and tourists.



Photo 3.9-3. Looking northwest towards Saddle Mountain from Wahluke Slope (Viewpoint C)

➔ For Your Information

Photo 3.9-3 has been simulated in Chapter 4, Environmental Consequences, to show a new transmission line. See Photo 4.8-6.

3.9.1.4 Viewpoint D, Vernita Bridge

Segment D passes to the west of the heavily used and popular Vernita Bridge and Primitive Boat Launch. Due to the number of motorists and potentially sensitive recreationalist viewers, as well as the presence of natural water bodies and dramatic landforms, this area is considered to be visually sensitive.

3.9.2 Segment A

Segment A parallels the Schultz-Vantage 500-kV line through the Kittitas Valley along the edge of rural, agricultural lands and the base of the Wenatchee Mountains. This area is mostly rolling hills of sagebrush and rabbitbrush. Segment A crosses the gentle slope of the Wenatchee Mountains, the YTC, the Middle Canyon at the base of the Boylston and Saddle Mountains. (See Map 2, *Alternatives*.)



Photo 3.9-4. View from Carlson and Fairview Road looking east

Typical views in this area are generally foreground and middleground views of valley agricultural lands, and rolling hills of sagebrush and rabbitbrush. **Background** views are of the Wenatchee, Boylston, and Saddle Mountains and sky.

Viewers would be residents of the low-density, scattered valley homes, dispersed recreationalists, and motorists on Vantage Highway, Highway 90, Colockum, and other rural roads in the area. Approximately 25 residences occur within 500 feet of the line segment. Option 1 of the Sickler-Schultz Reroute would be in the foreground view for one residence. Option 2 would be farther away and have another line between the residence and the new line, but would still be within the foreground view down Wilson Creek.

Segment A would generally be in the background and adjacent to the existing Schultz-Vantage 500-kV transmission line, or at or near the base of the surrounding mountain ranges.

→ For Your Information

The **background** is more than 5 miles from the viewer.

Photo 3.9-5 has been simulated in Chapter 4, *Environmental Consequences*, to show a new transmission line. See Photo 4.8-1.



*Photo 3.9-5. View of Schultz-Vantage transmission line crossing of Vantage Highway
(View 1 on Map 10)*



Photo 3.9-6. Aerial view of Schultz-Vantage Middle Canyon approaching the Columbia River

3.9.3 Segment B

Option B_{NORTH} – Option B_{NORTH} would parallel the existing Schultz-Vantage 500-kV transmission line down Middle Canyon to the Columbia River, passing gently rolling sagebrush and rabbitbrush, steep cliffs, and the Columbia River to the Vantage Substation. (See [Map 2, Alternatives](#).) Although numerous lines converge here, the substation is generally out of view due to its location to the east and up-slope from Route 243.

In Middle Canyon, the Schultz-Vantage 500-kV line is typically out of view, but emerges at the east end of the canyon and cuts perpendicular across the Columbia River, becoming visible although not dominating the view for motorists on Route 243. It is part of the foreground with the Columbia River and Wanapum Dam, and middleground with the Columbia River, its adjacent bluffs, the Saddle Mountains, and sky.

Viewers would be motorists on Route 243 and other rural roads in the area; residents of the low-density, scattered homes; dispersed recreationalists; and visitors of the Wanapum Dam.



Photo 3.9-7. Existing Schultz-Vantage transmission line crossing of the Columbia River looking west toward the Saddle Mountains (View 2 on Map 10)

Option B_{SOUTH} – This line option begins as the same alignment as the north end of Segment C, travels south approximately 1 mile, then turns east and runs down Middle Canyon to the Columbia River, where it would parallel the Vantage-Raver line on the south side.

In Middle Canyon, the existing ROW is typically out of view from most viewers except where it emerges at the east end of the canyon and cuts perpendicular across the Columbia River. In this area, it would be visible, yet not dominant in the view, to motorists on Route 243 as part of the foreground with the Columbia River and Wanapum Dam and middleground with the Columbia River, its adjacent bluffs, Saddle Mountains and sky. Recreational users of the John Wayne Trail would also have foreground views of the new line for the first 2 miles, just east of Segment C.

Viewers are motorists on Route 243 and other rural roads in the area, residents of the low density, scattered homes, dispersed recreationalists and visitors of the Wanapum Dam.

3.9.4 Segment C

Segment C would require new ROW across the YTC. The YTC comprises four parallel basaltic ridges, with associated valleys that run northwest to southeast. Topography at the YTC varies from low plains to escarpments, and tends to be more rugged in the eastern portions that drain to the Columbia River. Vegetation is typically dominated by sagebrush and rabbitbrush.



Photo 3.9-8. View from Route 24 looking north towards Yakima Ridge

Segment C would cross steep, rugged terrain of big sagebrush and grassland areas, the crest of the western portion of the Saddle Mountain Ridge, the steep, rugged terrain of the four parallel basaltic ridges, the Yakima Ridge, rolling terrain of sagebrush and grasslands, and orchards and vineyards. (See Map 2, Alternatives.)



Photo 3.9-9. Aerial view of eastern edge of Yakima Training Center looking South

Segment C would be remote from most potential viewers, although tribal users and dispersed recreationalists are sometimes permitted into areas of the YTC. Segment C could potentially be visible as it crosses Yakima Ridge in the background from SR 243, but would not be dominant in the view. At the southern end of this segment, the proposed route would become visible to motorists for a short distance as it crosses SR-24 on its way to the new Wautoma Substation.

3.9.5 Segment D

Segment D would parallel or replace the existing Vantage-Midway 230-kV line from the Vantage Substation up and over the Saddle Mountains, down through rolling range land, across heavily used agricultural areas on the Wahluke Slope, through the western corner of the Saddle Mountain Unit of the Hanford Reach National Monument, and over the Columbia River to the Midway Substation. South of the Midway Substation, it would parallel the existing Big Eddy - Midway 230-kV line up the steep slope of the Umtanum Ridge, across rolling sagebrush, grassland and agricultural areas, and up and over the Yakima Ridge to the proposed Wautoma Substation. (See Map 2, *Alternatives*.)

Due to the length of Segment D and the diversity of terrain and viewers, smaller portions of the segment are discussed in more detail below.

3.9.5.1 Wanapum Dam/Vantage Substation to Crab Creek

This area generally consists of foreground and middleground views of sagebrush, grasslands, orchards, transmission lines, and the Columbia River and background views of the surrounding mountains and sky. Viewers would be the few residents of Beverly and Schwana, motorists on Highway 243, some dispersed recreationalists who use the Columbia River and adjacent areas, and dedicated recreationalists at the Wanapum Dam. Four residences are within 500 feet of the proposed ROW.



Photo 3.9-10. View of Vantage-Hanford transmission line from Vantage Substation looking south towards the Saddle Mountains

3.9.5.2 North Face of Saddle Mountains

The north face of the Saddle Mountains consists of foreground and middleground views of the steep, rocky, dry, slopes of the Saddle Mountains, Crab Creek, and adjacent Columbia River, with background views of the sky and distant views through the pass. Viewers would be motorists on Route 243, the few residents of Beverly and Schwana, some dispersed recreationalists who use the Columbia River, Crab Creek Wildlife Area, Milwaukee Road Corridor and the Saddle Mountains, and tourists at the Wanapum Dam.



Photo 3.9-11. Aerial view of agricultural areas and existing transmission line east of Mattawa looking north to Saddle Mountains

3.9.5.3 Wahluke Slope

This area consists of foreground and middleground views of agricultural lands and transmission lines, and background views of the surrounding mountain ranges and sky. Viewers would be agricultural workers, a few residents, dispersed recreationalists, and local motorists.

3.9.5.4 Bluff Above Highway 243 to Midway Substation

This area consists of foreground views of the Columbia River and sagebrush areas, middleground views of sagebrush, the adjacent bluff and the Hanford Site facilities, and background views of the sky. Viewers would be motorists on Route 243 and some dispersed recreationalists, such as boaters on the Columbia River.

3.9.5.5 Midway Substation to the New Wautoma Substation

Typical views in this area consist of foreground and middleground views of sagebrush, grasslands, and agriculture, and background views of mountains and sky. The Big Eddy-Midway transmission line is generally not the dominant view. It crosses open sagebrush and agricultural areas, and is only visible from a short section of Route 24. Viewers would be motorists on Route 24 and local agricultural workers.



Photo 3.9-12. Aerial view of valley between Umtanum and Yakima Ridge Big Eddy-Midway transmission line



Photo 3.9-13. View looking southeast from Route 24 towards the Saddle Mountains Unit at Vantage-Hanford transmission line crossing

3.9.6 Segment E

Segment E would parallel the existing Vantage-Hanford 500-kV transmission south from the Vantage Substation, near the Wanapum Dam, cross over the Saddle Mountains, down rolling range land, across heavily used agricultural areas on the Wahluke Slope, through the middle of the Saddle Mountain Unit of the Hanford Reach National Monument, and over the Columbia River to the Hanford Substation.



Photo 3.9-14. Existing view of No Wake Lake near Crab Creek looking south toward Vantage-Hanford

3.9.6.1 Wanapum Dam/Vantage Substation to Crab Creek

Segment E would travel south for 4 miles across gently sloping terrain of sagebrush and grasslands, several orchards and open water areas with associated wetlands. A few residences are located near Beverly and Schwana to the west. Highway 243 runs parallel and west of the proposed route.

Typical views in this area consist of foreground views of sagebrush and grasslands, middleground views of sagebrush, grasslands, orchards and the Columbia River, and background views of the surrounding mountains. Viewers would be the few residents of the area, motorists on Highway 243, and dispersed recreationalists. One residence is located within 500 feet of the proposed route.

3.9.6.2 North Face of Saddle Mountains

Segment E would cross a very steep, rocky, dry, north-facing slope at the western edge of a naturally formed cut in the Saddle Mountain Ridge that runs east/west. The existing Vantage-Hanford 500-kV line scales this rocky slope. The cut in the Saddle Mountain Ridge is formed by the Columbia River and possesses good scenic qualities. Typical views in this area generally are foreground and middleground

views of the steep, rocky, dry slopes and adjacent Columbia River, and background views of the sky and distant views through the pass. Viewers would be the few residents, motorists on Route 243, dispersed recreationalists, and dedicated recreationalists at the Wanapum Dam.

3.9.6.3 Wahluke Slope

At the top of the Saddle Mountains, Segment E would travel south across the rugged terrain of big sagebrush and grassland areas into heavily agricultural areas, orchards, vineyards and local roads that stretch across the Wahluke Slope to the southeast and end at Highway 24 at the edge of the Saddle Mountain Unit of the Hanford Reach National Monument. Typical views in this area generally are foreground and middleground views of agricultural uses, and background views of the surrounding mountain ranges and sky. Viewers would be agricultural workers, a few residents, dispersed recreationalists, and local motorists.



Photo 3.9-15. View looking northeast from 24 SW near L Street SW

3.9.6.4 Saddle Mountain Unit of the Hanford Reach National Monument

Segment E would cross sagebrush areas that transition to grasslands near the Columbia River. The existing Vantage-Hanford transmission line is generally not the dominant view. Typical views in this area consist of foreground and middleground views of adjacent sagebrush and agricultural lands and background views of the sky. Viewers would include motorists on Route 24.

3.9.6.5 Columbia River Crossing to Hanford Substation

From the Columbia River to the Hanford Substation, Segment E crosses grass and sedge with some small willows near the river's edge and open water to the heavily disturbed landscape at the Hanford Substation. Typical views in this area consist of foreground and middleground views of the Columbia River, sagebrush, and Hanford Site facilities and background views of the horizon and sky. Viewers would be workers at the Hanford Site and dispersed recreationalists (boaters) on the Columbia River.

3.9.7 Segment F

Segment F runs east from the Vantage Substation, south up to the top of the Saddle Mountains, and then parallels the ridgeline until it reaches the existing Grand Coulee-Hanford 500-kV transmission line, where it crosses rolling rangeland at the edge of heavily used agricultural areas on the Wahluke Slope, the Saddle Mountain Unit of the Hanford Reach National Monument, and the Columbia River to the Hanford Substation. (See Map 10, *Visual Analysis*.)

3.9.7.1 Vantage Substation to Crab Creek

From the Vantage Substation to Crab Creek, Segment F (a new corridor) would cross gently sloping terrain of sagebrush and grasslands, several orchards and open water areas with associated wetlands. There are a few residences near Beverly and Schwana to the west. Highway 243 runs parallel and west of the proposed route. Typical views consist of foreground views of sagebrush and grasslands, middleground views of sagebrush, grasslands, orchards and the Columbia River, and background views of the surrounding mountains. Viewers would include the few residents, motorists on Highway 243, and dispersed recreationalists.



Photo 3.9-16. View of area near Vantage Substation

3.9.7.2 North Face of Saddle Mountains

Segment F would cross a very steep, rocky, dry, north-facing slope at the western edge of a naturally formed cut in the Saddle Mountain Ridge. Although existing transmission lines scale this rocky ridge to the west, Segment F would create a new corridor on a relatively undisturbed mountain face. Typical views consist of foreground and middleground views of the steep, rocky, dry slopes, Crab Creek and adjacent Columbia River, and background views of the sky. Viewers would include the few residents, motorists on Route 243, and dispersed recreationalists.



Photo 3.9-17. The north face of the Saddle Mountains (View 3 on Map 10)

➔ For Your Information

Photo 3.9-17 has been simulated in Chapter 4, Environmental Consequences, to show a new transmission line. See Photo 4.8-5.

3.9.7.3 Saddle Mountain Ridge

Segment F would create a new corridor across rolling and steep big sagebrush areas on the south side of the Saddle Mountains, parallel to the ridgeline. Typical views consist of foreground and middleground views of sagebrush, and background views of the Saddle Mountains and sky. Viewers would include local motorists, the few residents, Wahluke Slope agricultural area workers, and dispersed recreational users of the Saddle Mountains.

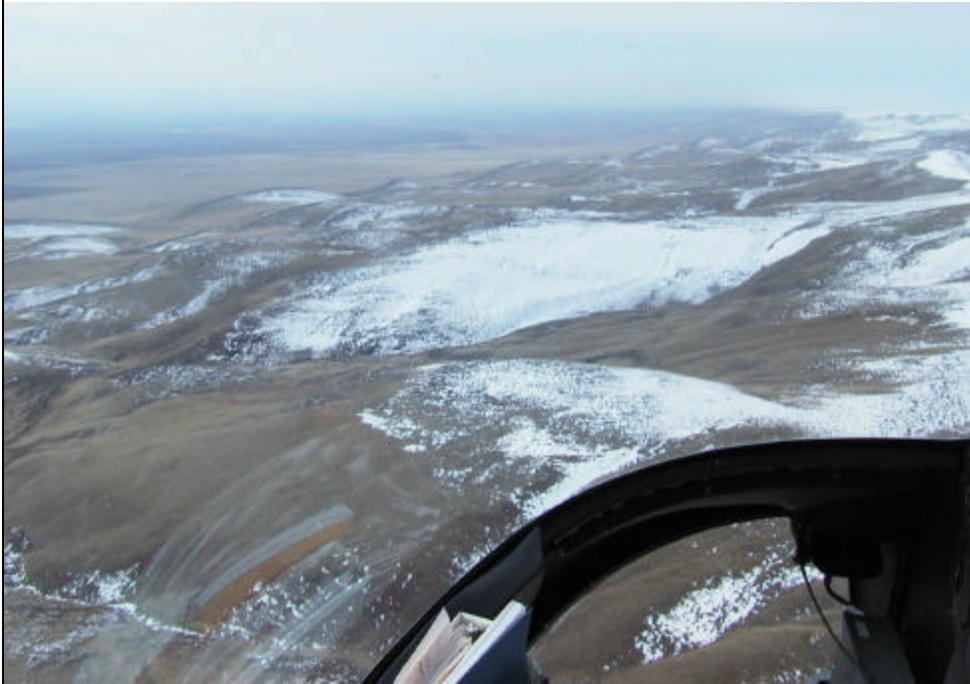


Photo 3.9-18. Aerial view of the south slope of the Saddle Mountain Ridge looking southwest towards Mattawa

3.9.7.4 Wahluke Slope

Segment F would parallel the existing Grand Coulee-Hanford transmission line and be only visible for a short distance for most viewers. Typical views consist of foreground views and middleground views of agricultural uses and sagebrush and background views of the Saddle Mountains and sky. Viewers are motorists on Highway 24 and the few local roads, and dispersed recreationalist users of the Saddle Mountain Unit of the Hanford Reach National Monument.

➔ For Your Information

Photo 3.9-19 has been simulated in Chapter 4, Environmental Consequences, to show a new transmission line. See Photo 4.8-7.



Photo 3.9-19. View of Grand Coulee-Hanford line looking north near Highway 24 (View 4 on Map 10)



Photo 3.9-20. View looking south from top of bluff overlooking the Saddle Mountains Unit of the Hanford Reach National Monument adjacent to Grand Coulee–Hanford line

3.9.7.5 Hanford Reach National Monument/Hanford Site

Segment F crosses big sagebrush, descends a 200 foot bluff to a flat area where the landscape transitions to grasslands/sedge/ small willows near the Columbia River, crosses over the Columbia River and ends at the Hanford Substation. Typical views consist of foreground and middle ground views of the grasslands and background views of distant mountains and sky. The transmission line would only be visible for short distances. Viewers would include motorists on Route 24, workers at the Hanford Site, and dispersed recreational users (boaters) on the Columbia River.

3.9.8 Fiber Optic Line

North of the Vantage Substation, the fiber optic line would pass through an area of wetlands and sagebrush, over agricultural areas and sagebrush of the Frenchman Hills, across the lakes and exposed rock channels of Quincy Lakes Wildlife Area, then angles northwest across the agricultural and sagebrush lands between Lynch Coulee and Moses Coulee where it terminates at the Columbia Substation. Typical views consist of foreground and middle ground views of shrub-steppe and channeled scablands or circle crops and orchards and background views of low hills and distant mountains and sky. Viewers would include motorists on Interstate 90 and rural roads to the north and State Highway 28, recreational users at Quincy Lakes Wildlife Area, and workers in the orchards and farmlands.