

### **Categorical Permission Alteration Description – 3. Borrow Areas**

The categorical permission may cover borrow areas excavated in the floodway. Such proposals would require a geotechnical investigation to determine if the proposed borrow activity would increase seepage beneath the levee or expose soils susceptible to erosion. Special geotechnical requirements may apply to borrow areas proposed near a bridge, riverbank, pipeline or cable crossing beneath the channel, or a water control structure (e.g., a weir).

The minimum distance of the borrow area to the levee toe is 300 feet. Borrow sites authorized under this categorical permission may not exceed 5 acres in size. A geotechnical investigation is required before initiating any borrow activity within the federal project easement.

If the borrow material will be used to build or modify a levee, the borrow area should be cleared and grubbed to the extent needed to obtain fill material free of inappropriate matter including any type of vegetation. The proposed borrow area must not contain riparian habitat or woody vegetation. The borrow site must be revegetated with native species or returned to the previous use after material is removed.

Waterside borrow areas must be designed to fill slowly on a rising river and drain fully on a falling river. The borrow area must have side slopes of 3H:1V or flatter and a bottom that is sloped to drain away from the levee in a downstream direction. No ponding is permitted at the levee toe.

Excavation depth is determined by factors such as (1) depth to groundwater, (2) location of undesirable borrow material, (3) preservation of an adequate thickness of impervious layer, and (4) environmental considerations. An impervious layer of the thickness determined by geotechnical analysis should be left at the bottom of the borrow area in locations where the seepage gradients are critical.

Areas that contain soils exhibiting hazardous or toxic characteristics, even if naturally occurring, must not be used for borrow material. Areas where known historic or cultural resources are located must not be used for borrow.

Borrow areas should be located far enough away from the channel to prevent migration of water into the borrow area.

- Borrow-related materials and equipment must not be stored:
- On the levee or within the waterside or landside easements
- In a way that could destabilize the riverbank
- Within the river flowage area during flood season
- In a way that could impede access to the levee

Levee patrolling, operation, maintenance, and flood-fighting take precedence over borrow-related hauling operations.

### **Categorical Permission Alteration Checklist – 3. Borrow Areas**

Please note, the following checklist is intended for planning purposes only and reflects information that USACE reviewers will look for when considering a Section 408 request for borrow areas under the Categorical Permission. To be reviewed under the Categorical Permission, the proposed project must adhere to all requirements of the Categorical Permission, including the full alteration description (see previous page). The plans and narrative project description should reflect this information.

Geotechnical investigation included with application:

Borrow area located at least 300 feet from the levee toe:

Total area of borrow site(s) is a maximum of 5 acres:

No riparian habitat or woody vegetation in proposed borrow site:

After material is removed, borrow site will be:

Revegetated with native species  Returned to the previous use

Waterside borrow sites designed to fill slowly on a rising river and drain fully on a falling river:

Borrow area has side slopes of 3H:1V or flatter:

Bottom of borrow area is sloped to drain away from the levee in a downstream direction:

Borrow area will not promote ponding at the levee toe:

No soils exhibiting hazardous or toxic characteristics:

No known historic or cultural resources located in borrow area:

Borrow related materials and equipment will not be stored on the levee or within the waterside or landside easements, in a way that could destabilize the riverbank, within the river flowage area during flood season, or in a way that could impede access to the levee: