Idaho Forest Practices Act Rule Summaries IFPA - Stream Crossings

Rule 040.02. Road Specifications and Plans. Road specifications and plans shall be consistent with good safety practices. Plan each road to the minimum use standards adapted to the terrain and soil materials to minimize disturbances and damage to forest productivity, water quality, fish, and wildlife habitat.

- e. The following rule applies to installations of new culverts and re-installations during road reconstructions or reinstallations caused by flood or other catastrophic events. Culverts used for temporary crossings are exempt from the fifty (50) year design requirement, but they must be removed immediately after they are no longer needed and before the spring run-off period.
 - i. Culvert installations on fish bearing streams must provide for fish passage.
 - ii. Design culverts for stream crossings to carry the fifty (50) year peak flow using engineering methods acceptable to the department or determine culvert size by using the culvert sizing tables below. The minimum size culvert required for stream crossings shall not be less than eighteen (18) inches in diameter, with the exception of that area of the Snake River drainage upstream from the mouth of the Malad River, including the Bear River basin, where the minimum size shall be fifteen (15) inches.

CULVERT SIZING TABLE – I USE FOR NORTH IDAHO AND THE SALMON RIVER DRAINAGE

This culvert sizing table will be used for the area of the state north of the Salmon River and within the South Fork Salmon River drainage. It was developed to carry the fifty (50) year peak flow at a headwater-to-diameter ratio of one (1).

Watershed area (acres)	Required Culvert Diameter (inches)	Culvert Capacity (cubic foot/sec)
less than 32	18	6
33-74	24	12
75-141	30	20
142-240	36	32
241-366	42	46
367-546	48	65
547-787	54	89
788-1027	60	112
Strongly consider having culverts larger culverts, arches, etc.	than sixty (60) inches designed, or consider alterna	ative structures, such as bridges, mitered
1028-1354	66	142
1355-1736	72	176
1737-2731	84	260
2732-4111	96	370
4112-5830	108	500
5831-8256	120	675

CULVERT SIZING TABLE – II USE FOR SOUTH IDAHO

This culvert table will be used for the area of the state south of the Salmon River and outside the South Fork Salmon River Drainage. It was developed to carry the fifty (50) year peak flow at a headwater-to-diameter ratio of one (1).

Watershed area (acres)	Required Culvert Diameter (inches)	Culvert Capacity (cubic foot/sec)
less than 72	18#	6
73-150	24	12
151-270	30	20
271-460	36	32
461-720	42	46
721-1025	48	65
1026-1450	54	89
1451-1870	60	112
Strongly consider having culverts larger that culverts, arches, etc.	n sixty (60) inches designed, or consider altern	native structures, such as bridges, mitered
1871-2415	66	142
2416-3355	72	176
3356-5335	84	260
5336-7410	96	370
7411-9565	108	500
9566-11780	120	675
Culverts larger than 120 inches must be de	signed; consider alternative structures.	

See exemption for southeast Idaho in Subsection 040.02.ii of this rule.

iii. Relief culverts, and those used for seeps, springs, wet areas, and draws shall not be less than twelve (12) inches in diameter for permanent installations.

- f. On existing roads that are not reconstructed or damaged by catastrophic events, landowners or operators are encouraged, but not required, to replace or provide mitigation for culverts that do not provide for fish passage in accordance with Subsection 040.02.e.i. or cannot carry the fifty (50) year peak flow of Subsection 040.02.e.ii. (above).
- g. Stream crossings, including fords, shall be minimum in number and planned and installed in compliance with the Stream Channel Protection Act, Title 42, Chapter 38, Idaho Code, and with culvert sizing requirements of Subsection 040.02.e. (above). Fords are an acceptable stream crossing structure on small, shallow streams, with flat, less than four percent (4%) gradients. Fords should cross the stream at right angles. Approaches shall be adequately cross-drained and rocked for at least seventy-five (75) feet. During times of salmonid spawning and egg incubation or to protect active domestic water diversions, use shall be limited to low water, dry, or frozen conditions and hauling or equipment crossing trips limited to minimize sediment delivery to streams.
- h. Avoid reconstruction of existing roads located in stream protection zones, except for approaches to stream crossings, unless it will result in the least long-term impact on site productivity, water quality, and fish and wildlife

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