

NICAN disputes byway analysis

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SANDPOINT -- The Idaho Transportation Department is underestimating the amount of sedimentation that will take place in Sand Creek as a result of the U.S. Highway 95 bypass, according to the North Idaho Community Action Network.

The group leading the fight against the controversial highway realignment project in Sandpoint contends ITD's hydraulic analysis is deeply flawed because it is based on Lake Pend Oreille's winter pool elevation of 2,055 feet. NICAN argues ITD should have used the "historic" winter pool figure of 2,051 feet.

NICAN said ITD picked the higher elevation because it produced a more favorable result that supports the department's position that putting a substantial amount of fill in the creek will not cause excessive erosion or significantly alter the creek's channel.

"Putting that much fill in the creek is going to have a profound effect on the creek -- that's the bottom line," said Liz Sedler, executive director of NICAN.

Had ITD used the lower elevation, NICAN projects creek velocity estimates at the shoreline extension would jump from 0.25 and 0.14 feet per second to 3.89 and 4.15 feet per second. Meanwhile, the creek's ability to move sediment would increase from 0.003 pounds per square foot to 0.49 pounds per square foot.

Dubious of ITD claims, NICAN hired two experts to review the department's technical information. The River Design Group of Whitefish, Mont. concluded that the higher lake elevation produced results which suggest impacts will be slight.

Washington Group International, the byway project's lead contractor, has indicated permissible shear stress (the ability to move materials) would be in the range of 0.045 to 0.05 pounds per square foot, according to a technical memo. But the shear stresses increased exponentially when the 2,051 level was used.

"The shear stresses at 2051 are 10 times as powerful as the 'permissible' shear stresses cited by WGI," Matt Daniels, a hydraulic engineer for the River Design Group, said in his report.

Daniels estimates anywhere from 800 to 5,000 cubic yards of stream bed silt and sand could be mobilized and deposited downstream because of the narrower creek channel and an increased velocity, which could impact shoreline property.

Mike Fitzgerald, ITD's byway project manager, said both winter pool elevations were considered during the analysis, but only one of the figures was listed in the application for an encroachment permit from the Idaho Department of Lands.

"We did calculate 2,051, but we didn't submit that as part of the permit because the agencies directed us to do 2,055, and at 2,055 what happens is you end up with very little sediment movement because you've got more water in the channel," Fitzgerald said.

Fitzgerald disputes the amount of sediment that NICAN is projecting.

"We have a discrepancy on how many sediments will move," Fitzgerald said. "They claim a lot larger number than we do."

NICAN also hired Terry Howard, a geotechnical engineer, to examine the amount of settlement would occur as a result of the highway infrastructure and fill. Howard estimates settlement of up to 12 inches for some retaining walls.

"There will be adjustments of each structure to the settlement that will require repair and/or replacement and more likely than not the roadway surface will be undulating due to the differential settlement, Howard said.

NICAN also contends the risk of failure has not been considered by ITD.

"There's a huge potential for failure," said Sedler. "It's the unknown and they haven't addressed that."