MF Nooksack River Fish Passage Two-Year Monitoring: Topographic and Photographic Analysis

## Channel Profiles

The following longitudinal profile plots include topographic data of the potential fish passage flow routes outlined in the Site Overview Map (Figure 2.1). Profile lines were extracted from the compiled as-built surface, the December 2020 UAV digital surface model, the modeled water surface elevations (WSE) at 170 cfs (the flows estimated at the time of the as-built survey), and the 200 - ft slopes of the Dec 2020 terrain.

## Modeled As-Built Conditions








## Roadway near time lapse camera ("Small Bridge" on map)

October 2020


September 2021


September 2022


Photograph taken looking upstream from the roadway at the approximate timelapse camera location


September 2021


December 2021


September 2022


Photographs taken looking downstream (left), perpendicular to flow (center) and upstream (right) at the photograph location marker


September 2021


December 2021


September 2022


Photographs taken looking downstream (left), perpendicular to flow (center) and upstream (right) at the photograph location marker

## Bridge Upstream Location (Bridge US)

October 2020


September 2022


Photographs taken from the bridge center railing looking at the upstream horizon (left), upstream oblique (center) and directly below bridge (right)

## Bridge Downstream Location (Bridge DS)

October 2020


Photographs taken from the bridge center railing looking at the downstream horizon (left), downstream oblique (center) and directly below bridge (right)

October 2020


September 2021


September 2022


Photographs taken looking downstream from construction roadway

Fishway Outfall Slide (Transect 437 on map)
October 2020


September 2022


Photograph taken looking down at fishway outfall slide from Transect 437 marker

## Intake 1 (Transect 760 on map)

October 2020


September 2022


Photograph taken looking upstream from Transect 760 marker

## Intake 2

October 2020


September 2022


Photographs taken looking downstream (left), perpendicular to flow (center) and upstream (right) at the photograph location marker

## Intake 3

October 2020


September 2022


Photographs taken looking downstream (left), perpendicular to flow (center) and upstream (right) at the photograph location marker

## Intake 4

October 2020


September 2022


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September 2021


December 2021


September 2022


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October 2020


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December 2021


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Transect 700
October 2020


September 2021


September 2022


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September 2021


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September 2022


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