Virtual Fraser River Field Trip

The Virtual Fraser River field trip was recorded by Jeremy Venditti, Tingan Li and Jon Beasley-Murray in 2020 on October 24-25, October 28 and November 6 and in 2021 on November 1.

The objective of the field trip is to follow the Fraser River from the Interior Plateau of British Columbia, through the Fraser Canyon, across the bedrock-alluvial transition, through the alluvial gravel bed reach, across the gravel sand transition, through the alluvial sand bed reach and across the river-ocean transition where the Fraser Delta is deposited.

There are four themes of the field trip:

- 1. River morphology and processes
- 2. Landslides & river blockages
- 3. Sediment budgets of the alluvial reaches
- 4. Human control exerted on Fraser River and Delta

The virtual field trip is made up of 16 videos on Jeremy Venditti's YouTube channel. They are organized in a playlist here:

https://www.youtube.com/playlist?list=PLlxl-1SzY1Bz19Ftj-X0UD_d9tIxmqGq7

The videos are meant to be watched in order!

Each video is between 5 and 15 minutes long. They can be watched at your leisure.

Virtual Field Trip Assignment

Your assignment will be a *literature review* on the landforms at *one* of the themes, as it relates to one or more field sites. Your literature review should provide a description of the landform and a heavy emphasis on the geomorphic processes responsible for its development. Your assignment should be typed and be no more than 6 pages of written text (12 point font, double spaced, 1 inch margins). Your reference list should include at least 10 cited works that you have read and may include textbooks, but should be *primarily* original research articles.

Your literature review should consist of the following:

- 1. Title page (separate page): title for your essay, course name, instructor's name, and your name (not included in your 6 page text limit).
- 2. An *Introduction* that describes the landform you are writing about without reference to the Fraser River (~1 page).
- 3. A *Study Site* section that presents a Fraser River field trip site as a prototypical example of the landform(s) you are writing about (<1 page). This should include a Google Earth map of the site with title, scale & north arrow. A good example of a study site description is in Venditti and Church (2014; doi:10.1002/2014JF003147)

- 4. A *Formative Processes* section that describes how the particular landform develops (~3-4 pages). This should be based on the primary literature. Be sure to use diagrams and images. Use subheadings where appropriate.
- 5. A *Conclusion* summarizing the main points of your researched paper and a statement about things that need further investigation about the landform(s) or processes that formed it. Your conclusion should be itemized and the further investigation statement should be a short paragraph (<0.5 of a page).
- 6. *References*. A list of all references to texts, journal articles, map(s) or websites cited in your report. Use the referencing style in the *Journal of Geophysical Research Earth Surface*. Take a few minutes to study the referencing style in the text and the references section of papers.

Do not use Venditti, 2021, lecture notes or field trip as a reference.

Helpful hints:

- Each figure should have a descriptive caption and a figure number. Use the style in the *Journal* of Geophysical Research Earth Surface.
- Annotate your figures with labels, where appropriate.
- Spell check your report!
- Be sure to have someone else proof read your report carefully.
- All photos and diagrams referenced to primary sources unless they are your own.
- Don't use other students' maps or photos.

Plagiarism will not be tolerated.

Due date: Mon November 29 by Canvas by 12:30.

Late assignments will be penalized by one grade per day after the automatic extension.