

To: Julie Davies O'Shea
Les Perkins
Bryan Nordlund
Dave Ward

FROM: Alan Ritchey

DATE: 3-18-10

Please consider the following ODFW comments on the Farmers Screen Siting Criteria (version 1/27/10).

1. There is no clear statement clarifying that the screen will be operated such that a minimum depth of water will exist over the entire screen surface. I think #2 is trying to get at that but this reads a little vague. What is "...proper amount..." and what does it mean to "...operate properly...". I understand that FCA is working to get the current 12" water depth dropped to 6" for certain diversion types, but there should be a placeholder for whatever water depth is needed for each project. In addition to adequate water to maintain depth over the screen, there must be water to meet the water users need at the lowest flows expected during the period of operation.
2. In number 4, sentence 2 states "In the case of modular screens, adequate entrance velocity is typically provided by utilizing freeboard in the conveyance canal upstream of the screen flume." What about non-modular screens?
3. Is number 4 really saying that entrance velocity is adjusted by diverting more or less water down the canal by manipulating the diversion dam or headgate? In general, number 4 reads more like operating instructions. How is this used to assess a site in the field to determine if an FCA screen is appropriate for that site.
4. Can the reference to the Froude Number be changed to something more understandable if this section is included as siting criteria.
5. The minimum total head differential of 0.2 feet described in number 5 may be cutting it to close to ensure a high level of success. ODFW suggests replacing 0.2 with 0.5 feet.