

**From:** [Benner, Keri](#)  
**To:** [Rempel, Laura](#)  
**Cc:** [Hwang, Jason](#); [Rempel, Rick](#)  
**Subject:** RE: request for input on stream-race sockeye in Fraser near Chilliwack  
**Date:** 2010-Dec-17 3:36:48 PM

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Hi Laura,

Based on the information we have there is very little evidence to support that a persistent Sockeye spawning population exists in Maria slough. We have a couple of observations on record in 1978 and 1986 (2 and 100, respectively) with spawning timing recorded as late November-early December. This timing does map on to other late run lower Fraser populations such as Harrison River and Cultus Lake. Although the Sockeye Program does not conduct regular surveys of the area, surveys for Chinook, Chum and Coho are conducted in the area annually from September through January. Looking at the data from these surveys since 2006, with the exception of one observation (2 in 2006) no Sockeye have been observed. Given the frequency and duration of the annual surveys in the area, I am confident that we would have detected a persistent population if it existed and that the odd sightings are strays from other populations.

Hope this helps.

*Keri Benner  
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**From:** Rempel, Laura  
**Sent:** December 15, 2010 9:36 AM  
**To:** Peters, Ken; Rempel, Rick  
**Cc:** Benner, Keri; Hwang, Jason  
**Subject:** FW: request for input on stream-race sockeye in Fraser near Chilliwack

Hi Ken and Rick (great last name!),

I work with Jason Hwang on the Fraser River gravel mining file. I've had some discussion with Matt Foy about rumour of a small stream-race group of sockeye that may spawn and rear in Maria Slough in the Fraser River just upstream of the Agassiz-Rosedale Bridge. DFO has received a proposal from the Province of BC to remove sediment from a gravel bar in this area ("Tranmer Bar"), and I want to assess the potential use of the bar by sockeye for spawning and rearing.

I checked in with Chris Wood and Neil Schubert (emails attached below), and Neil suggested I contact you both for information.

This figure shows the removal site on Tranmer Bar, as well as the Agassiz-Rosedale Bridge in the bottom left corner for reference. Maria Slough enters into the Fraser River on the back side (west) of Tranmer just upstream of a small bar labelled "Spaeti Bar". I have done considerable beach seining in the reach of river myself, in all seasons, and only ever caught incidental numbers of sockeye. But I'd still appreciate some expert input on the potential value of this area for sockeye. Any thoughts?



We are under a tight timeline to review this gravel mining proposal, so if you had any information you think may be helpful, I'd really appreciate hearing from you.

Thanks,

**Laura Rempel, Ph.D. R.P.Bio**

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**From:** Schubert, Neil

**Sent:** December 14, 2010 8:00 AM

**To:** Wood, Chris; Rempel, Laura

**Cc:** Hwang, Jason

**Subject:** RE: request for input on stream-race sockeye in Fraser near Chilliwack

Laura: If you haven't already, you should check with the Fraser stock assessment staff - Keri Benner in Kamloops is the program head, and the technicians that have likely worked in the area are Ken Peters and Rick Rempel, both out of the LFA office. Neil

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**From:** Wood, Chris

**Sent:** 2010-December-13 3:54 PM

**To:** Rempel, Laura

**Cc:** Hwang, Jason; Schubert, Neil

**Subject:** RE: request for input on stream-race sockeye in Fraser near Chilliwack

Hi Laura

Il was unaware of sockeye spawning in the Tranmer Bar - Maria Slough area, but my ignorance doesn't mean anything because I haven't done any personal research in that area

of the Fraser.

It seems to me that if sockeye have been seen spawning in this area, their progeny would not have access to lake habitat, so they must either be sea-type sockeye or strays from a lake-type population.

If tissue (e.g., fin) samples could be obtained for DNA analysis, it should be feasible to determine whether they are strays from other sampled lake-type populations.

From what you describe, I certainly would not rule out the existence of a sea-type population. We know that sea-type sockeye persist in the Harrison River and Widgeon Slough.

Moreover, the habitat you describe (gravel bars just upstream of slough habitat) is used by sea-type sockeye in other rivers (such as the Stikine where I have studied them most intensively).

I would want to investigate the strength of evidence that sockeye spawn there regularly - have they been observed actually spawning? if not, were they seen in spawning condition? in how many years? might they spawn there in most years or just sporadically?

Hope this helps. Let me know what you find out.  
cheers

CW

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