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**From:** Sarah Gallagher - NOAA Federal <sarah.gallagher@noaa.gov>  
**Sent:** Tuesday, March 19, 2019 4:57 PM  
**To:** Provins, Samuel  
**Subject:** Re: CC Data

Average portion of redd count constructed before Sept 15 ranged from 0-26% from 2003-15. Has that changed with recent years? And can you tell from your analysis if those were those redds more exposed to higher temperatures?

**Sarah Gallagher | Fish Biologist**

[NOAA Fisheries](#) | [West Coast Region](#)

*U.S. Department of Commerce*

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On Mon, Mar 18, 2019 at 3:28 PM Sarah Gallagher - NOAA Federal <[sarah.gallagher@noaa.gov](mailto:sarah.gallagher@noaa.gov)> wrote:  
Perfect thank you!

**Sarah Gallagher | Fish Biologist**

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On Mon, Mar 18, 2019 at 3:23 PM Provins, Samuel <[samuel\\_provins@fws.gov](mailto:samuel_provins@fws.gov)> wrote:

Hey Sarah,

Good talking to you. Ryan and I are going to try and get you three things:

1. General SR upstream timing
2. General Steelhead upstream timing
3. SR redd incubation temperature distribution
- 4 SR holding temperature distribution

Working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

Sam Provins, Fish Biologist  
Pacific Southwest Region  
United States Fish and Wildlife Service

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