

**Agenda**  
**GSSHA Calibration in HPC**  
**22 July 2021**

Thursday Jul 22, 2021

09:00 AM – 4:45 PM

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**Meeting Weblink:** <https://usace1.webex.com/meet/Jaime.A.Graulau-Santiago>

<b>09:00 – 09:10 am</b>	<b>Dial-in and Introductions</b>	<b><i>All (USACE-SAJ)</i></b>
<b>09:10 – 10:00 am</b>	<b>Overview Model Calibration and PEST Utility</b> <ul style="list-style-type: none"><li>▪ What is PEST</li><li>▪ Why PEST for Model Calibration/Verification</li></ul>	<b><i>Dave Welter (SFWMD – IMC)</i></b>
<b>10:00 – 11:00 am</b>	<b>Overview PSRP Project and GSSHA Model</b> <ul style="list-style-type: none"><li>▪ Project Overview</li><li>▪ Engineering during construction needs</li><li>▪ Flood Event Model application</li><li>▪ GSSHA Long Term Model application</li></ul>	<b><i>J. Graulau (USACE-SAJ)</i></b>
<b>11:00 – 12:00 pm</b>	<b>HPC set-up PSRP SWPF Model Calibration</b> <ul style="list-style-type: none"><li>▪ Long Term Model Set-up</li><li>▪ Period of Record Calibration/Verification</li><li>▪ PEST Set up in HPC system (ONYX)</li><li>▪ Debugging Calibration Run HPC<ul style="list-style-type: none"><li>○ Interactive vs. non-interactive qsub</li><li>○ Logging into specific nodes</li><li>○ “looking” at what’s happening at the computing node level</li></ul></li></ul>	<b><i>J. Graulau (USACE-SAJ)</i></b>
<b>12:00 – 1:00 pm</b>	<b>Lunch Break</b>	
<b>01:00 – 3:30 pm</b>	<b>Hands on Exercise</b> <ul style="list-style-type: none"><li>▪ Hands On Exercise</li><li>▪ Setting up a five-parameter calibration run for PSRP SWPF GSSHA Model<ul style="list-style-type: none"><li>○ Set up the PEST template files</li><li>○ Set up PEST Instruction files</li><li>○ Set up “slaves”</li><li>○ Set up pbs scripts for PEST run</li><li>○ Submitting the job to the system</li></ul></li></ul>	<b><i>J. Graulau (USACE-SAJ)</i></b>
<b>3:30 – 4:15 pm</b>	<b>PEST Results Calibration</b> <ul style="list-style-type: none"><li>▪ Overview of Calibration Results</li><li>▪ Objective Function Results</li><li>▪ Observed vs. Simulated Stages</li></ul>	<b><i>J. Graulau/C. White</i></b>
<b>4:15 – 4:45 pm</b>	<b>Open Discussion Q&amp;A PEST Calibration Process in HPC</b>	<b><i>All</i></b>
<b>4:45 pm</b>	<b>Adjourn</b>	