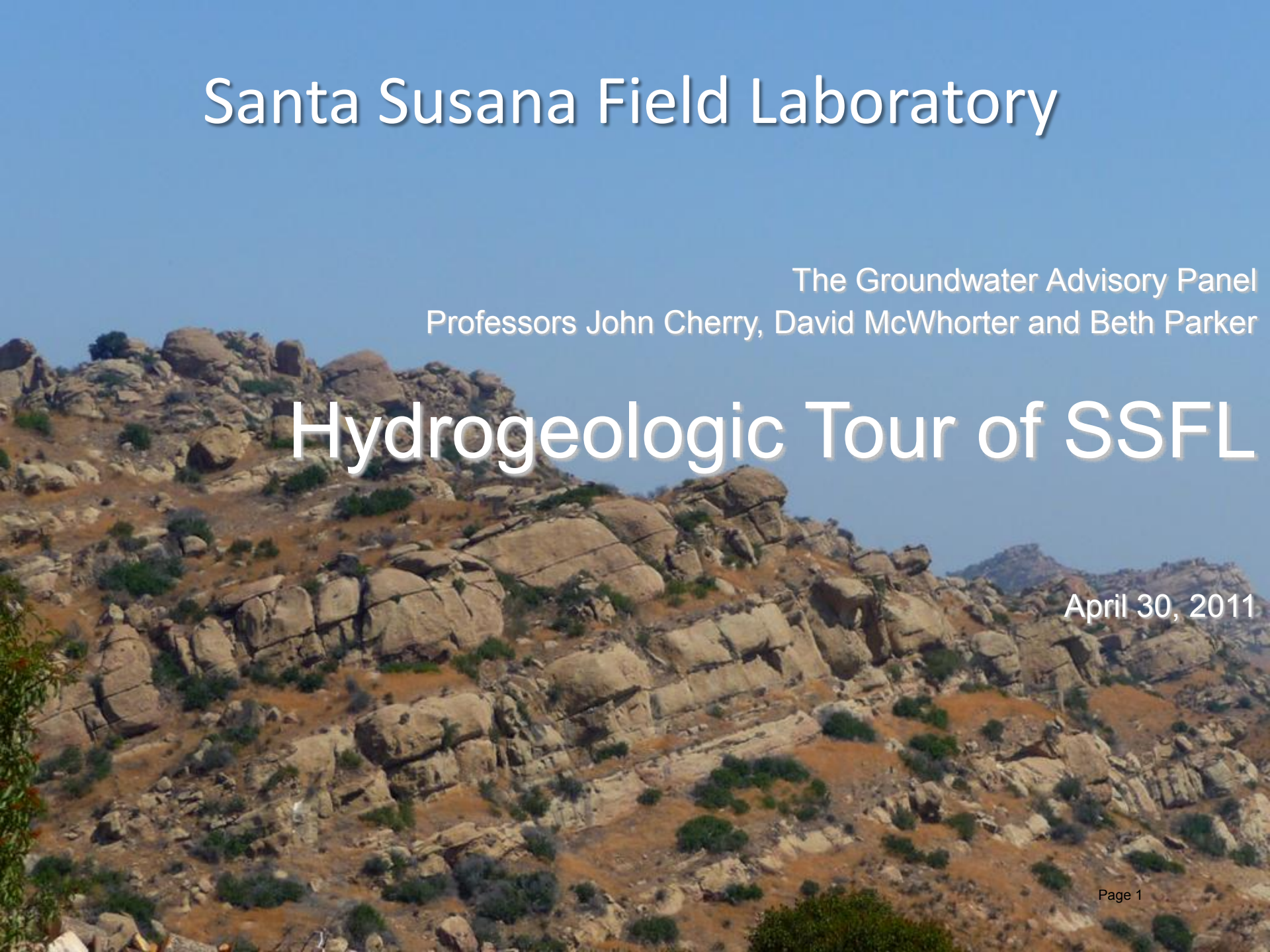
Santa Susana Field Laboratory

The Groundwater Advisory Panel
Professors John Cherry, David McWhorter and Beth Parker

Hydrogeologic Tour of SSFL

April 30, 2011



GROUNDWATER U

Building an understanding of groundwater at Santa Susana Field Laboratory

April 30, 2011 Hydrogeologic Tour of SSFL

On April 30, 2011, the Santa Susana Field Laboratory (SSFL) Groundwater Advisory Panel will lead a field trip that includes stops at five locations within the boundary of SSFL. The field trip will be led by Professors John Cherry, Dave McWhorter, and Beth Parker, who have studied the hydrogeologic and contaminant conditions at SSFL since 1996. They will be joined by Dr. Ross Wagner, who has extensively mapped the geology at SSFL over nearly ten years. The purpose of the tour is to familiarize interested participants in the local hydrogeologic conditions, which are influenced to varying degrees by the geology, and to show some of the tools that are used to characterize the groundwater, fracture network and contaminant distribution.

Stop One – Expendable Launch Vehicle (ELV) site. The first stop will be in the north-central part of SSFL at a site referred to as the ELV. At this stop, the Groundwater Advisory Panel will point out some of the geologic and topographic features that influence the local groundwater conditions. This stop will include a corehole (C-7) that illustrates many of the innovative tools that have been used to characterize the subsurface. Some of the characterization technologies will also be on display. An explanation of why the corehole location was selected will be provided along with an explanation of key findings.

Stop Two – Former Sodium Disposal Facility (FSDF). The second stop will include a review of the hydrogeologic and contaminant characterization work that has been conducted at the FSDF, which is at the far western extent of SSFL. The FSDF is located near the junction of the North Fault Zone and the Burro Flats Fault where the Santa Susana Formation abuts the Chatsworth Formation. Runkle Canyon is located off-site to the west-northwest of FSDF. At this stop, the Groundwater Advisory Panel will point out additional characterization technologies that were used at FSDF and other areas of SSFL and explain the insights gained regarding the understanding of contaminant transport and fate.

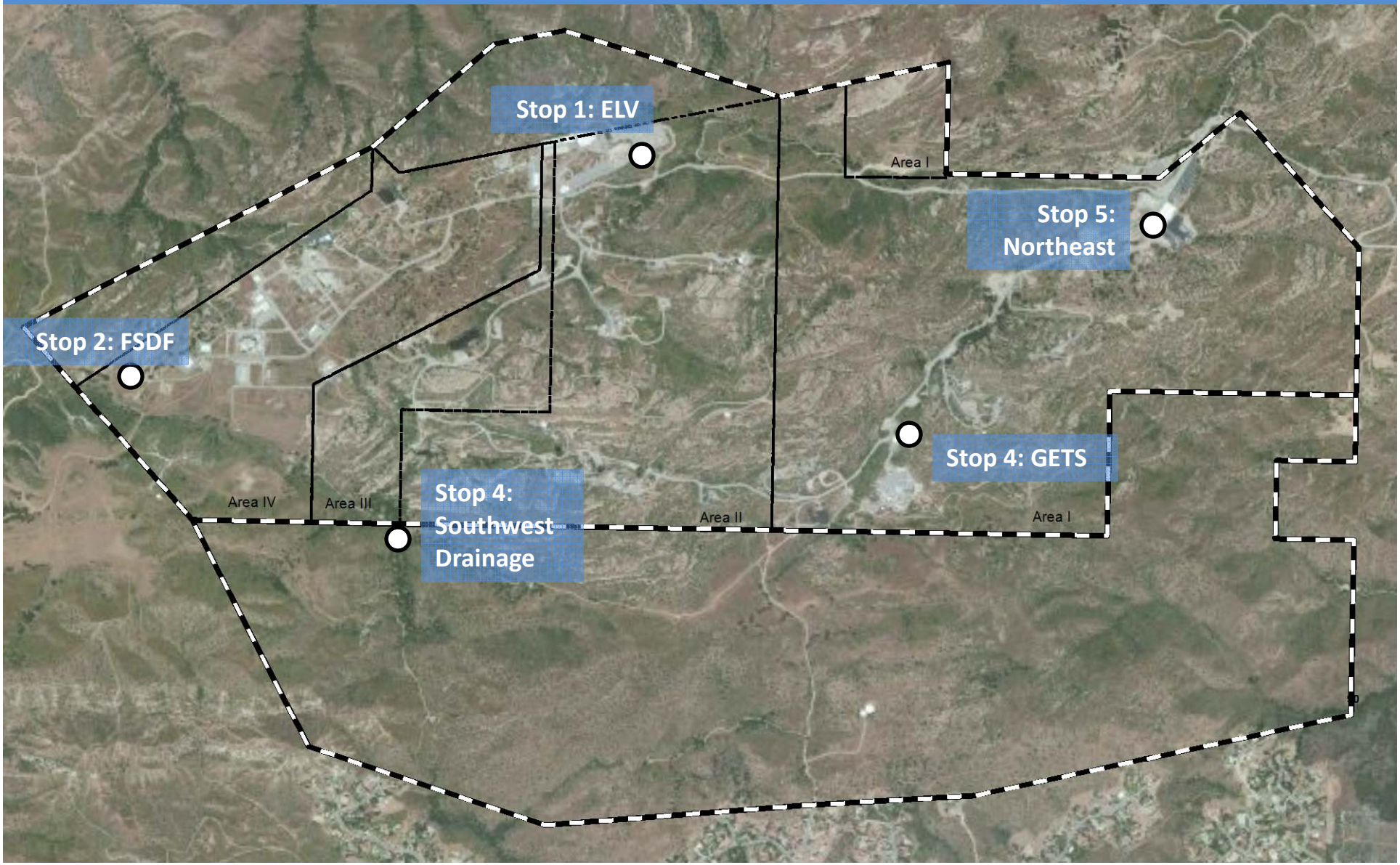
Stop Three – Southwest Drainage. From the FSDF, the tour will move to an on-site drainage in the southwest, where prior sampling of seeps has identified trichloroethylene and its daughter products. At this location, the Groundwater Advisory Panel will describe additional work planned to further evaluate the distribution of contaminants at and near the seeps and explain the effect, if any, that the Burro Flats fault may have in influencing the occurrence of the seeps. Tour participants will have the option of a 1/3 mile hike (with a change in elevation of about 160 feet) to get a closer look at the seeps. Less ambitious tour participants will stay near the buses.

Stop Four – Groundwater Extraction and Treatment System (GETS). At the fourth stop, tour participants will visit the GETS. Boeing's lead engineer for GETS, Debbie Taege, will point out the various parts of the treatment system and explain the purpose that each serves. Tour participants will have the option of a ¼ mile hike to an exposure of the Shear Zone near its junction with the Coca Fault.

Stop Five – Northeast Area (RD-35 Cluster). The last stop of the tour will be in the northeast part of SSFL. The Groundwater Advisory Panel will explain high-resolution groundwater techniques and the detailed nature of the local contaminant distribution. This area of the SSFL also includes some geologic features that will be pointed out and discussed, including the Shear Zone and IEL Fault.

Location of Stops: SSFL Hydrogeologic Tour

(April 30, 2011)



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