A scenic view of a snow-covered mountain slope. In the foreground, several evergreen trees are scattered across the snow. A person is visible in the middle ground, standing on the slope. In the background, a large, snow-capped mountain peak rises against a clear blue sky. The overall scene is bright and clear, suggesting a sunny day in winter.

Snow Surveying on the Sacramento, McCloud, Trinity, and Shasta Watersheds

Prepared by Marcus Nova – November 6th 2013

- 
- Diverse program
 - Multi Staffing Groups (fire, Rec)
 - 14 courses
 - Significant types of terrain
 - Elevation Ranges: 4500-8000ft



SweetWater

Parks

DeadFall

PetersonFlat

NorthFork

GrayRocks

SandFlat

MtShasta

TheMtShastaResort

Brewer

Ashcreek Crossing

DeadHorseCanyon

StoutsMdw

Courses

- **Sacramento**

- **Mt. Shasta – 1930**

- **North Fork – 1936**

- **Grey Rocks – 1941**

- **Sand Flat - 1945**

- **Sand Flat Automated – 1982**

Courses

- **McCloud**
 - **Stouts Meadow – 1944 (Since 2011, PG&E conducted)**
 - **Stouts Meadow Automated – 1983 (PG&E conducted)**
 - **Brewer Creek -1959**
 - **Ash Creek Crossing - 1944**
 - **Dead Horse Canyon - 1944**

Courses

- **Trinity**
 - **Dead Fall Lakes – 1946**
 - **Peterson Flat - 1983 (automated)**

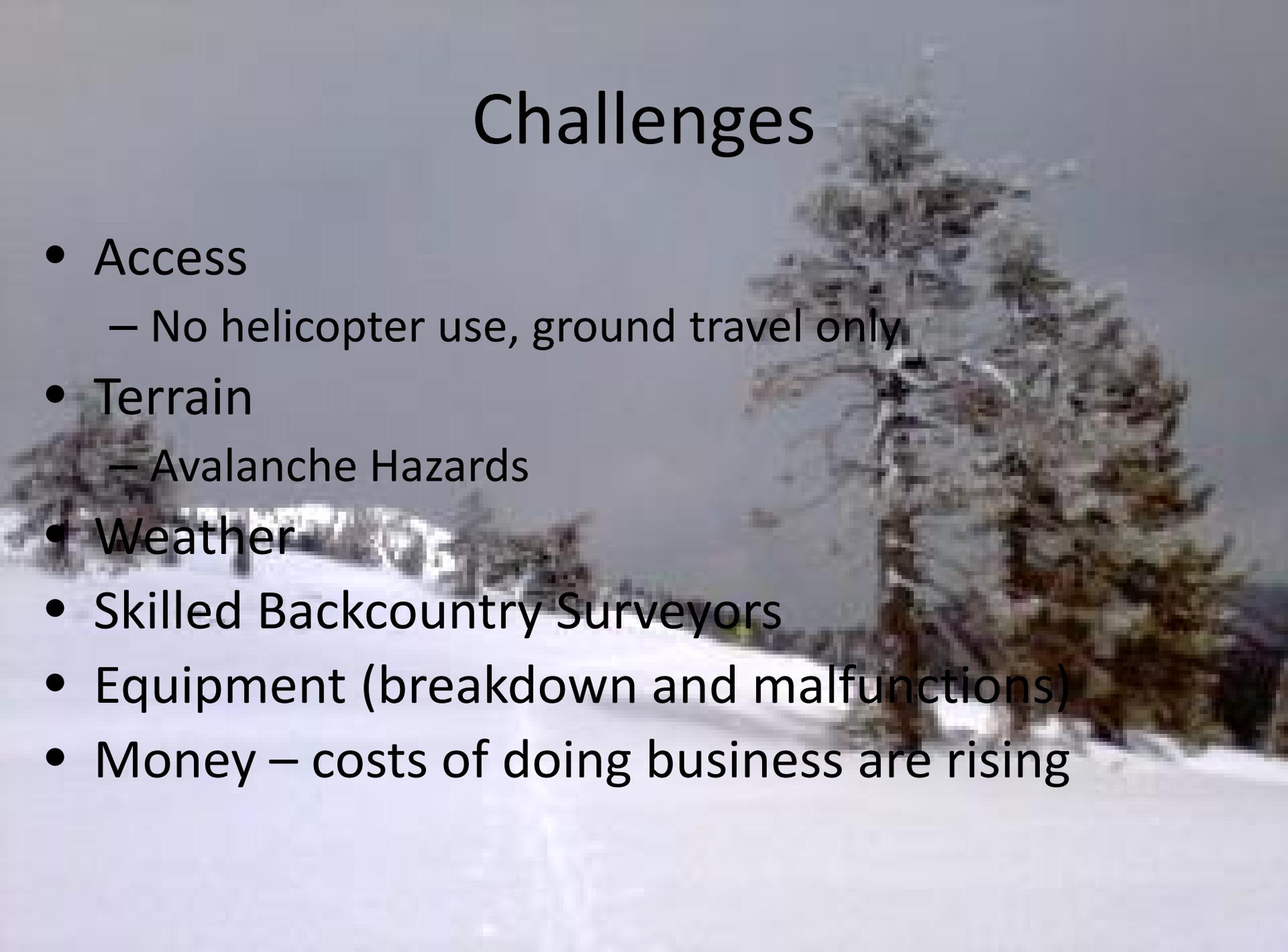
Courses

- **Shasta**
 - **Parks Creek - 1936**
 - **Sweet Water - 1936**

Interesting Facts

- Mt. Shasta – 1st snow course site in the system?
- Average April stab on the Mt. is around 120”
- Home of the “Single Dump World Record” 189” in February of 1959.

Challenges

A background image of a snowy mountain landscape. In the foreground, a large, dark evergreen tree stands on a snow-covered slope. The middle ground shows a valley with more snow-covered trees and a small structure. The background features a hazy, snow-covered mountain range under a grey sky.

- Access
 - No helicopter use, ground travel only
- Terrain
 - Avalanche Hazards
- Weather
- Skilled Backcountry Surveyors
- Equipment (breakdown and malfunctions)
- Money – costs of doing business are rising

Snow Course Maintenance

- Constant Work
- Storm damage is often
- Unsigned sites
- Rely on the corporate knowledge

North Fork – Sacramento



North Fork – Sacramento

A person wearing a red jacket and a grey hat is sitting on a snowy slope, facing away from the camera. They are surrounded by ski equipment, including skis, poles, and bags. The background features a dense forest of evergreen trees and a snow-capped mountain range under a clear blue sky.

Thinking Safety

It's our Priority
Case Study 1



North Fork - A New Conquest

Case Study II



20 mile round trip
Not accomplished since 2008





A hiker with a large red backpack is walking through a snowy field. In the background, there are tall evergreen trees and a snow-capped mountain peak under a clear blue sky. The scene is bright and sunny, with shadows cast on the snow.

Observing our increasing temps

Warm weather can wreak havoc on your travel conditions.



Dead Fall Country

9 miles in – 9 miles out



Successes in the last 3 years

A person is seen from behind, cross-country skiing on a well-groomed snowy trail. The skier is wearing a dark jacket and pants, and is using ski poles. The trail is surrounded by a dense forest of evergreen trees, some of which are covered in snow. The overall scene is a winter landscape with a clear path through the woods.

- Improved travel skill and knowledge
- %70-80 sampling success rate (up %20-30)
- Improved collaboration with DWR and Westside SHF
- A better understanding of our own Forest and conditions

Working Together

Quality support

Understanding of the field

Providing great training

Keeping strong communications

= Winning Team



Questions?

