

Southern California Edison ENGINEERING & TECHNICAL SERVICES

DAM SAFETY
ENGINEERING

DATABASE PROGRAM



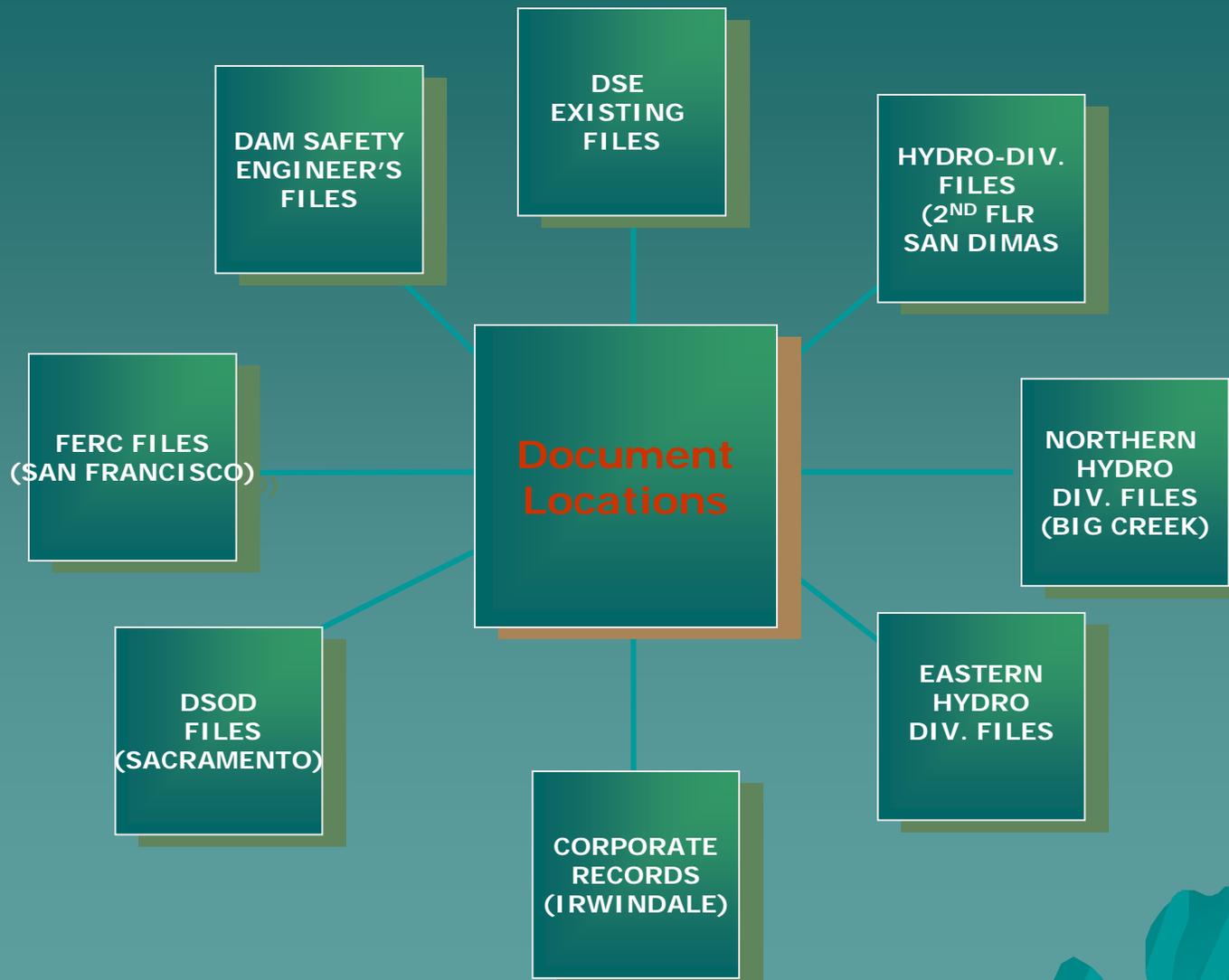
OVERVIEW

- ◆ SCE-DAM SAFETY ENGINEERING
- ◆ HOW CAN THIS BE A MANAGEMENT ISSUE?
- ◆ THE "ABC'S" OF "SCE'S DATABASE PROGRAM"
- ◆ GOOGLE EARTH AND SCE DBASE
- ◆ LESSONS LEARNED

QUICK VIEW OF INVENTORY OF OUR DAMS

◆ Total number	32
◆ FERC Jurisdiction	25
◆ DSOD Jurisdiction	31
◆ Oldest Dam (Crystal Lake) YEARS	105
◆ Newest Dam (Balsam) YEARS	30
◆ Average age YEARS	83

Document Locations



SCENARIO 1: WHERE IS THAT REPORT?



MANHOURS
RESOURCES
PRODUCTIVITY

SCENARIO 2: CAN WE START TO ORGANIZE?



MANHOURS
RESOURCES
PRODUCTIVITY

SCENARIO 3: **NATURAL DISASTERS!**

FIRE



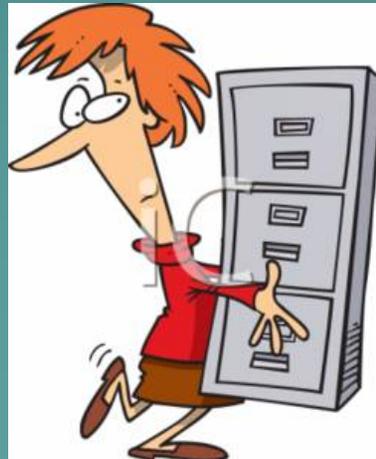
EARTHQUAKE



FLOOD



SCENARIO 3: CAN ANYONE HELP!



MANHOURS
RESOURCES
PRODUCTIVITY

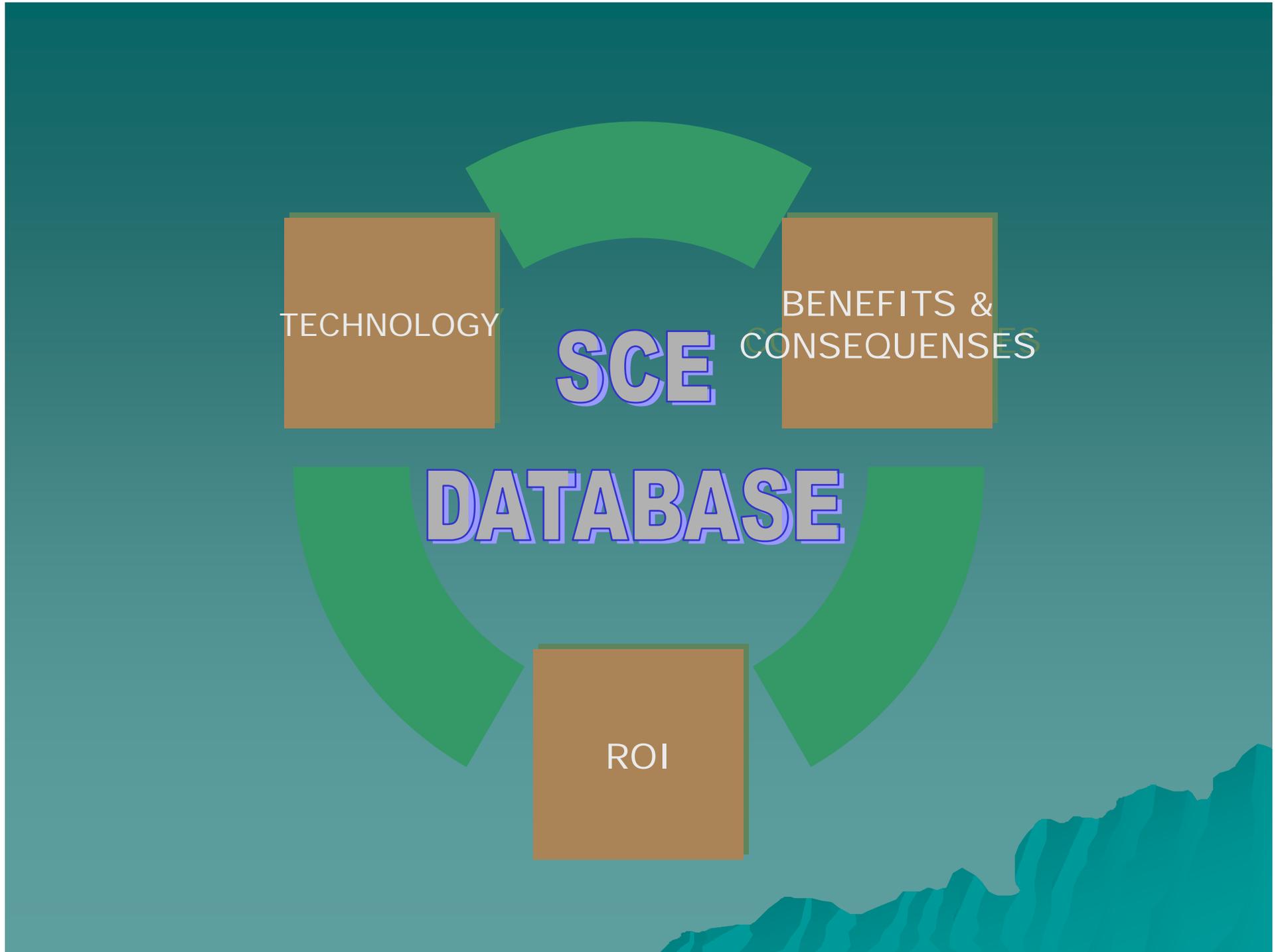
TECHNOLOGY

SCE

BENEFITS &
CONSEQUENCES

DATABASE

ROI



WHY IS THIS NEEDED?

- ◆ Protection of old/new documents (most documents were over 50 years old)
- ◆ Ease of data gathering/accessing/ updating
- ◆ Efficient document handling and control system
- ◆ Paperless Environment

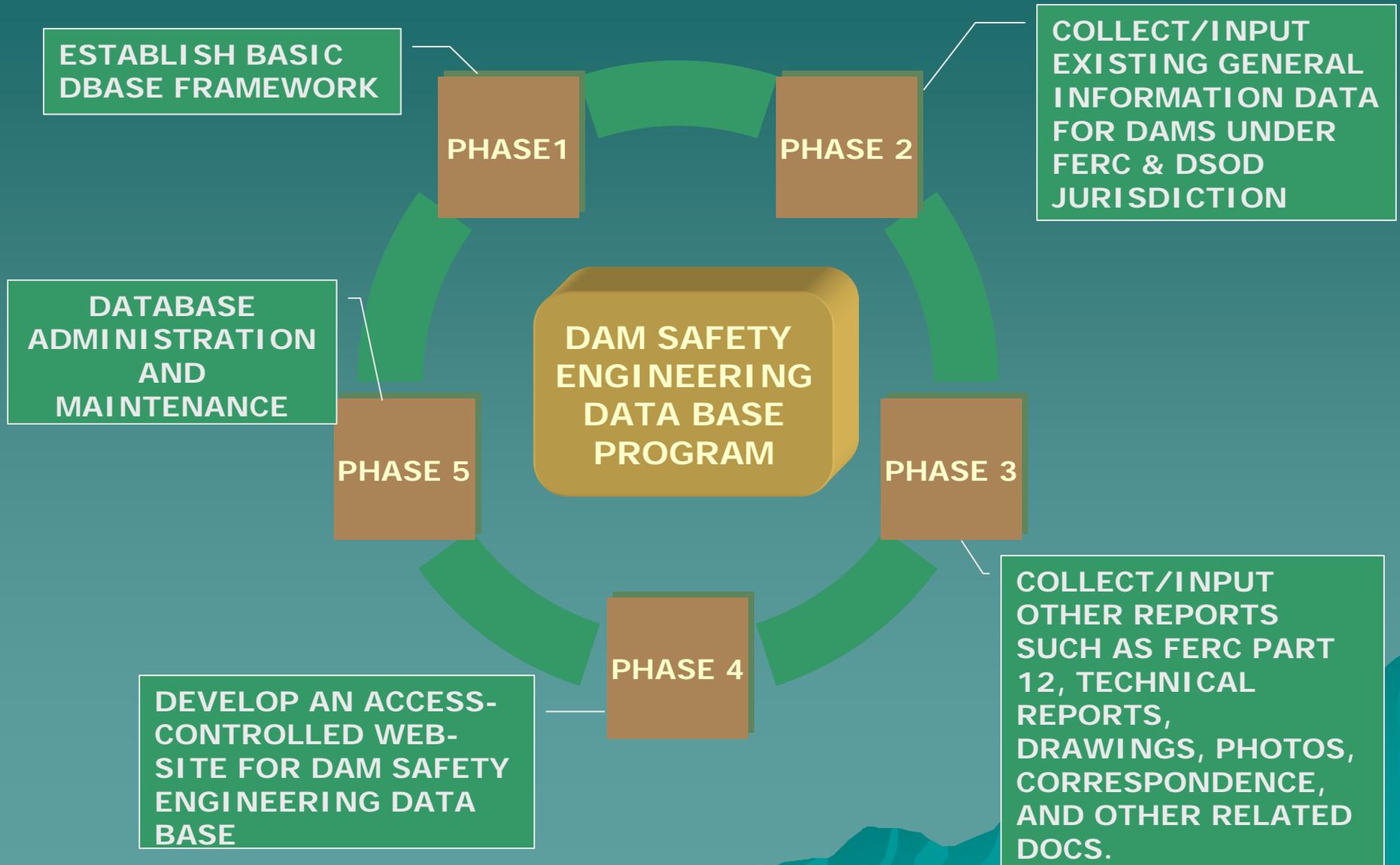
- ◆ Efficient field reporting/monitoring
- ◆ Ensure the right documents and records are accessible anytime.
- ◆ FERC will require Dam Safety related documents to be permanent file.

The

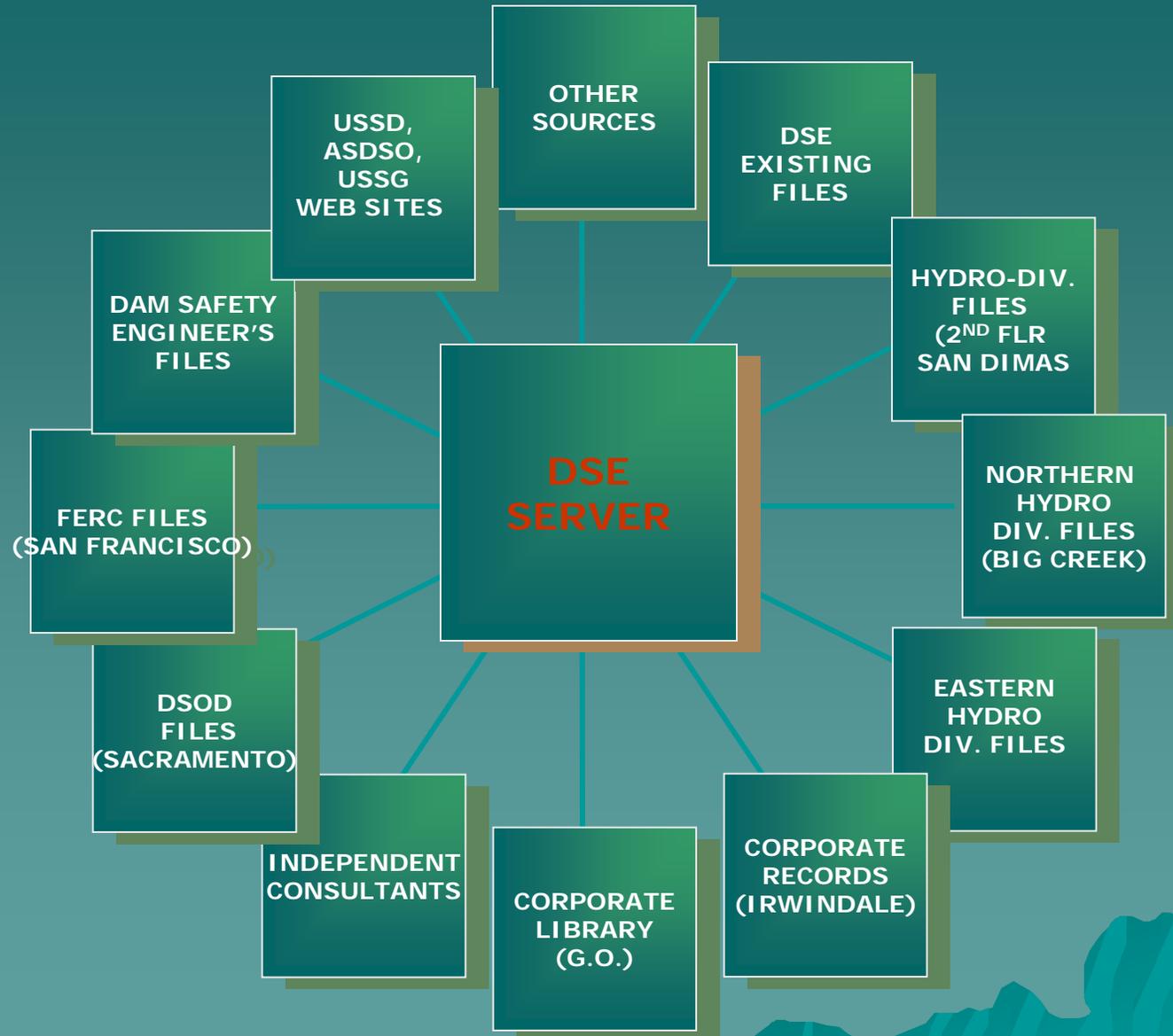


of SCE's
DATABASE
PROGRAM

PROJECT OVERVIEW

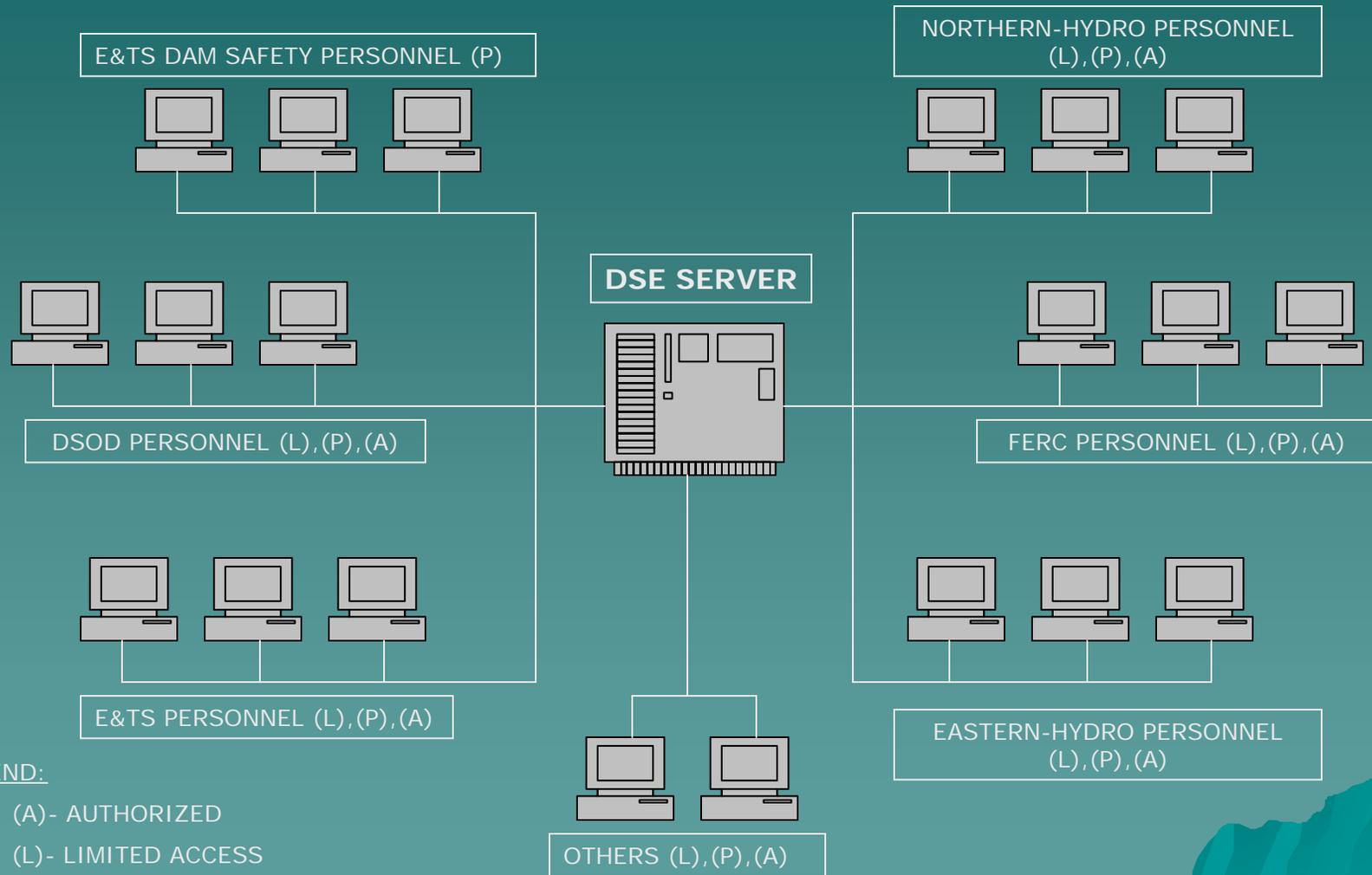


Dbase Information Sources





Dbase Link-System



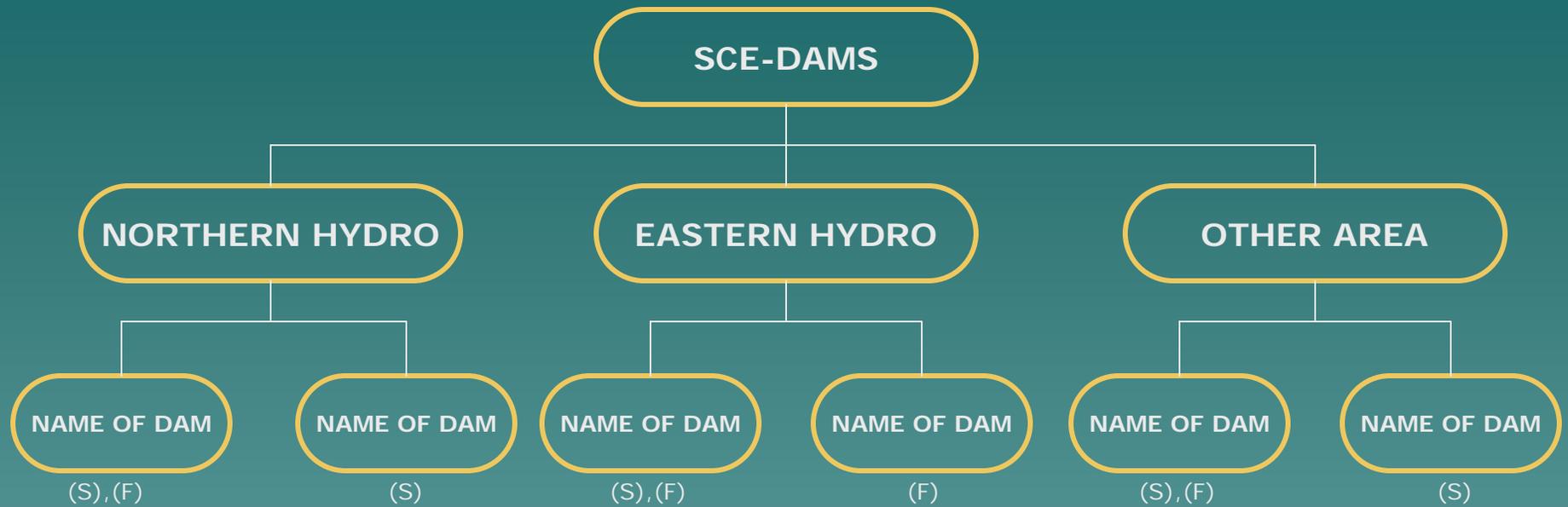
LEGEND:

(A)- AUTHORIZED

(L)- LIMITED ACCESS

(P)- PASSWORD PROTECTED

Data Base Framework

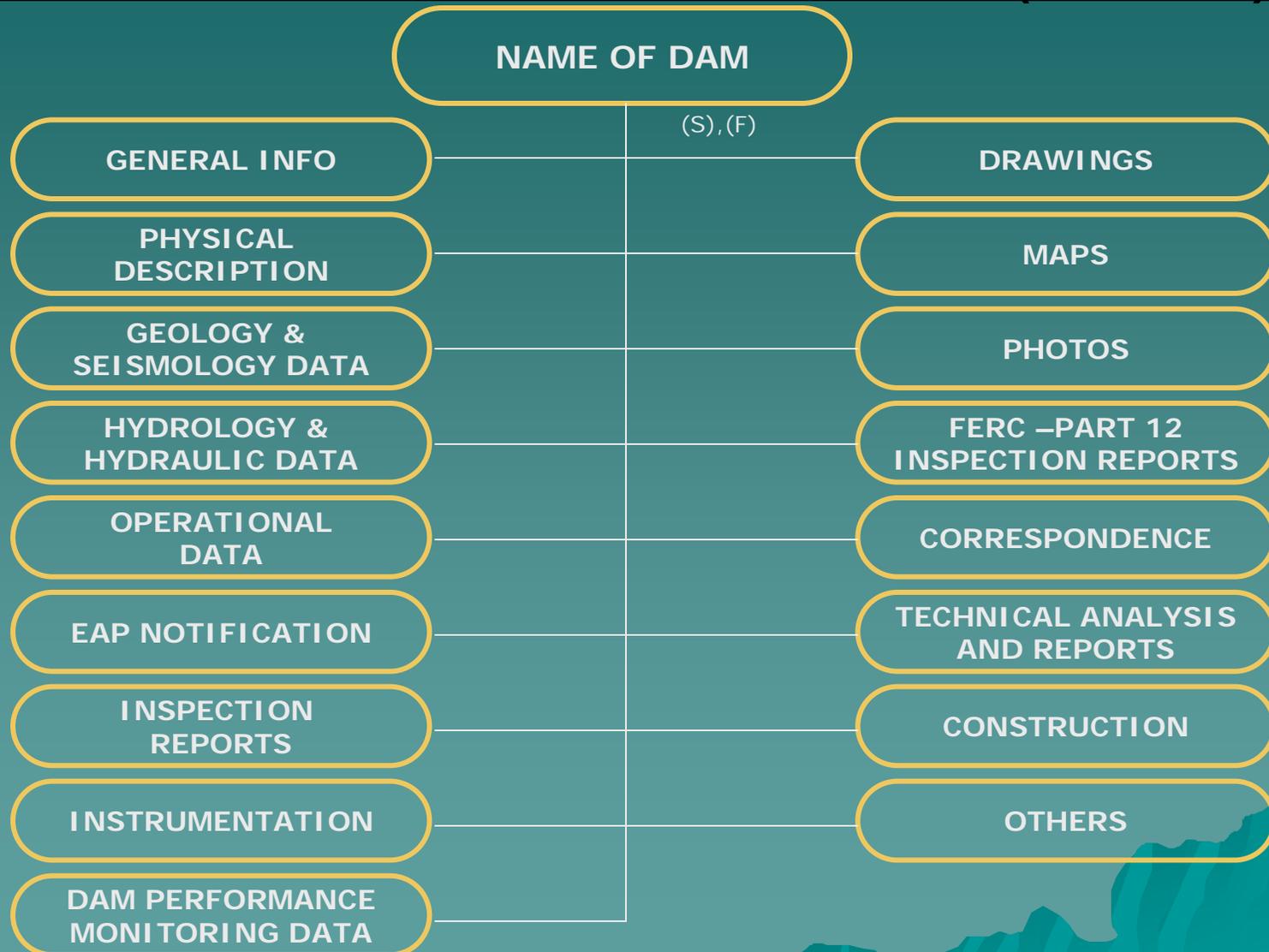


LEGEND:

(S) –DAMS WITHIN THE JURISDICTION
OF THE STATE OF CALIFORNIA

(F)- DAMS WITHIN THE JURISDICTION
OF FERC.

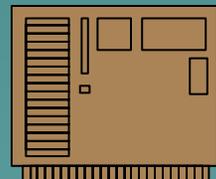
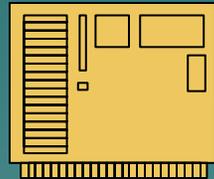
Data Base Framework (cont.)





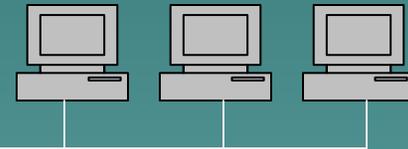
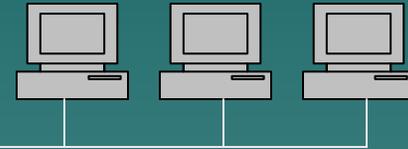
Dbase Link-System

**DSE LOCAL
SERVER**



SCE PORTAL

NORTHERN-HYDRO
PERSONNEL (L),(P),(A)



EASTERN-HYDRO
PERSONNEL (L),(P),(A)



E&TS DAM SAFETY
PERSONNEL (P)

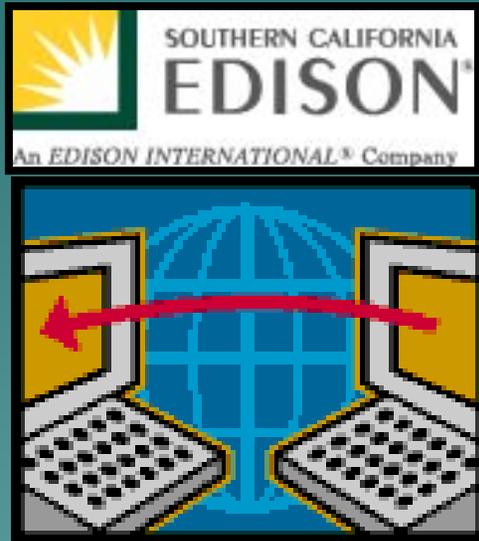
LEGEND:

(A)- AUTHORIZED

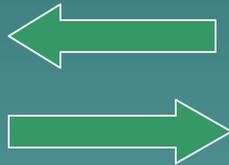
(L)- LIMITED ACCESS

(P)- PASSWORD PROTECTED

GOOGLE EARTH AND DSE DATABASE



**SCE-DSE
DATABASE**



GOOGLE EARTH

Search

Fly To Find Businesses Directions

e.g., Tokyo, Japan

Search input field with a magnifying glass icon

Places

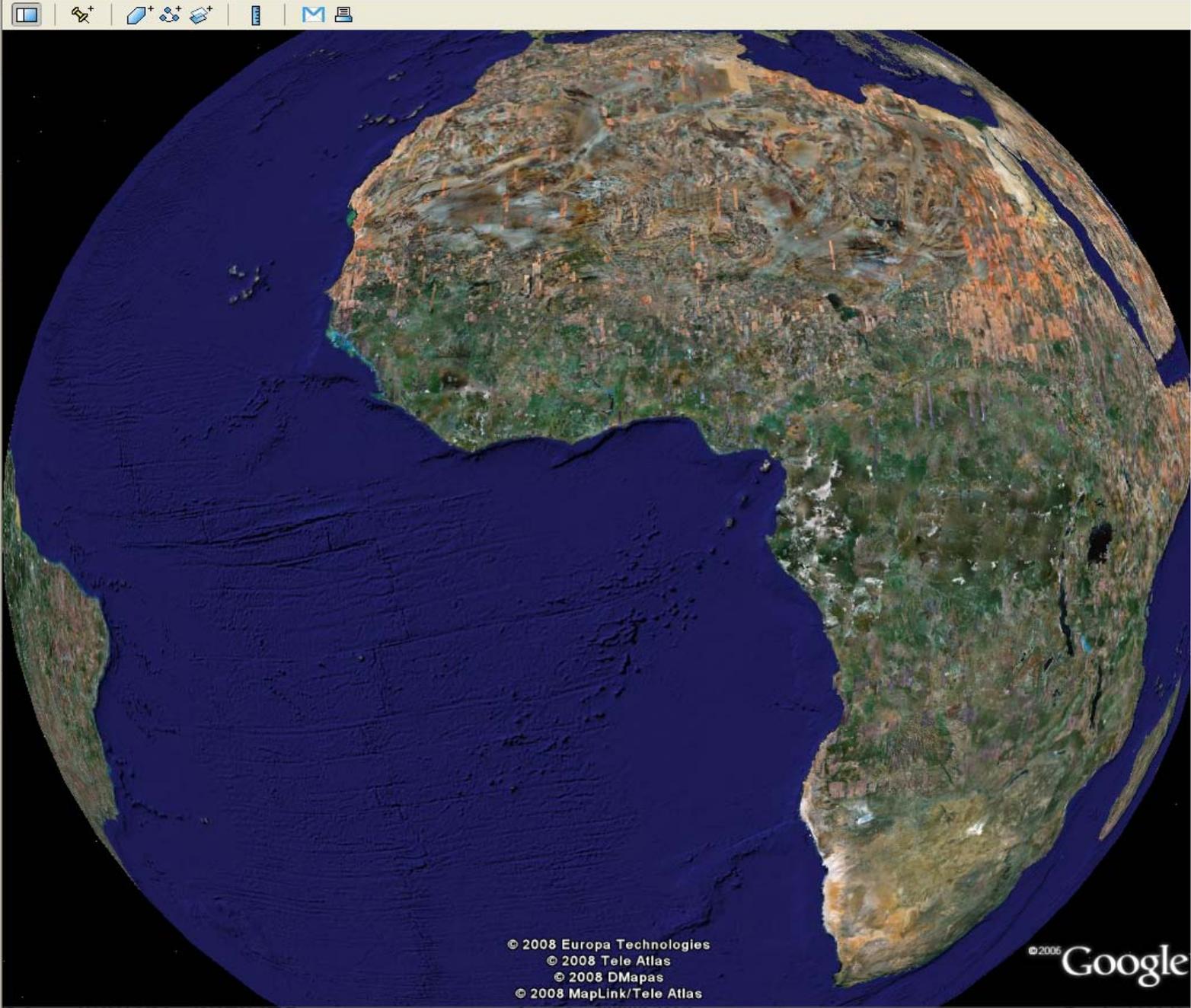
My Places

- Big Creek Dam 4
- Big Creek Dam 6
- Bear Creek Diversion Dam
- Mono Creek Diversion
- Rock Creek Diversion
- Mammoth Pool PH
- Big Creek No.3 PH
- Big Creek Dam 7
- Friant Dam, Millerton Lake
- Mammoth Pool Dam
- Portal Forebay
- Huntington Lake Dams
- Shaver Lake Dam
- Lundy Powerhouse
- Florence Lake Dam

Layers

View: All Layers

- New York Times
- Rumsey Historical Maps
- Travel and Tourism
- Trimble Outdoors Trips
- Volcanoes
- Webcams.travel
- YouTube
- Global Awareness
- Places of Interest
- More
- US Government
- Alternative Place Names
- Spot Image
- DigitalGlobe Coverage
- Tracks4Africa



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 © 2008 DMapas
 © 2008 MapLink/Tele Atlas

© 2006 Google

Pointer 6°23'44.61" S 13°05'19.67" E

Streaming | 100%

Eye alt 3944.40

Search

Fly To Find Businesses Directions

e.g., Tokyo, Japan

Search input field with a magnifying glass icon

Places

My Places

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- Huntington Lake Dams
- Shaver Lake Dam
- Lundy Powerhouse

Layers

View: All Layers

Primary Database



Google Earth

File Edit View Tools Add Help

Search

Fly To Find Businesses Directions

e.g., Tokyo, Japan

Places

- Mammoth Pool Dam
- Portal Forebay
- Huntington Lake Dams
- Shaver Lake Dam
- Lundy Powerhouse
- Florence Lake Dam
- Agnew Lake Dam
- Rush Creek Meadows
- VERMILION DAM
- GEM LAKE
- EARTHQUAKE SITE
- Saddlebag Dam
- Sightseeing

Select this folder and click on the 'Play' button below, to sta default

Layers

View: All Layers

- SCE Instrumentation
- Inundation Maps
 - Sunny Day Failure
 - PMF Failure
- Appurtenances

Rush Creek Meadows

Crack

WEIR

RECORDS

GRAPHS

RECORDS

GRAPHS

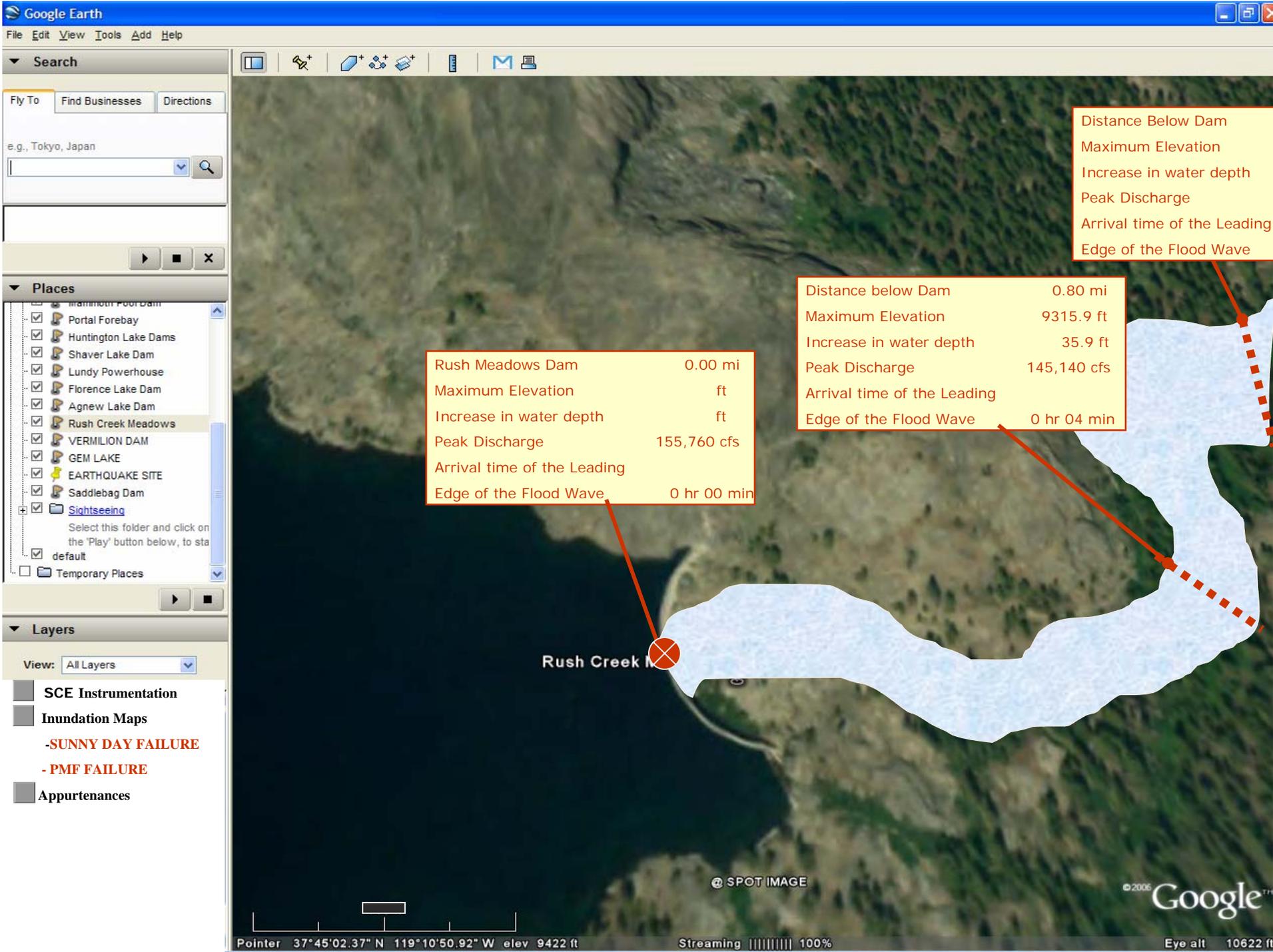
308 ft

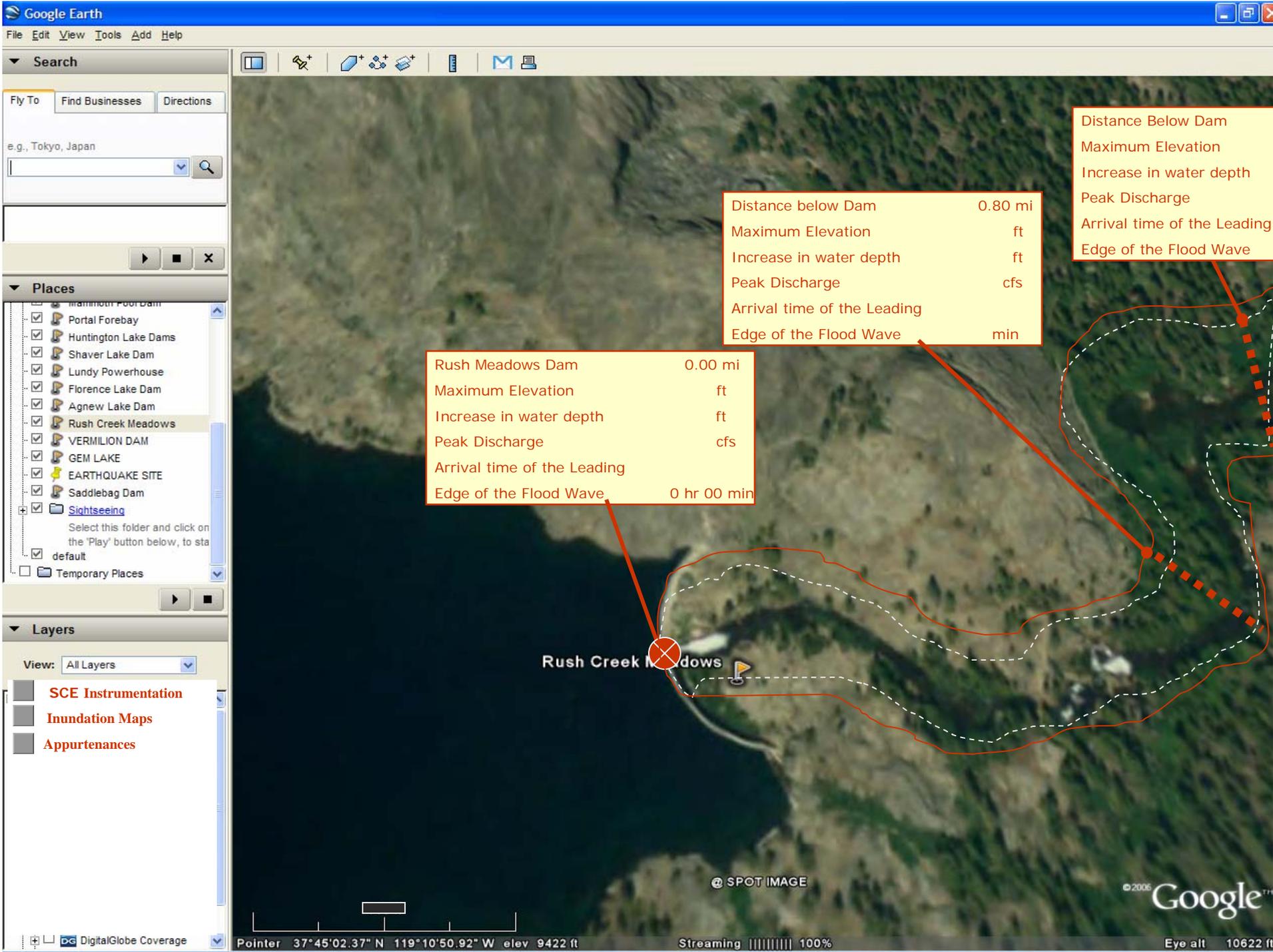
Pointer 37°45'02.37" N 119°10'50.92" W elev 9422 ft

Streaming 100%

Eye alt 10622 ft

© 2006 Google





LESSONS LEARNED:

- ◆ SECURITY IS NO.1 ISSUE
- ◆ WORK HABIT IS CRUCIAL
- ◆ ELECTRONIC DOCUMENT MANAGEMENT- CRITICAL FOR DSE
- ◆ OTHER BENEFITS BY GOING PAPERLESS.
- ◆ IMPORTANT TOOL FOR KNOWLEDGE TRANSFER
- ◆ DELAY IS NOT AN OPTION

Thank You !

