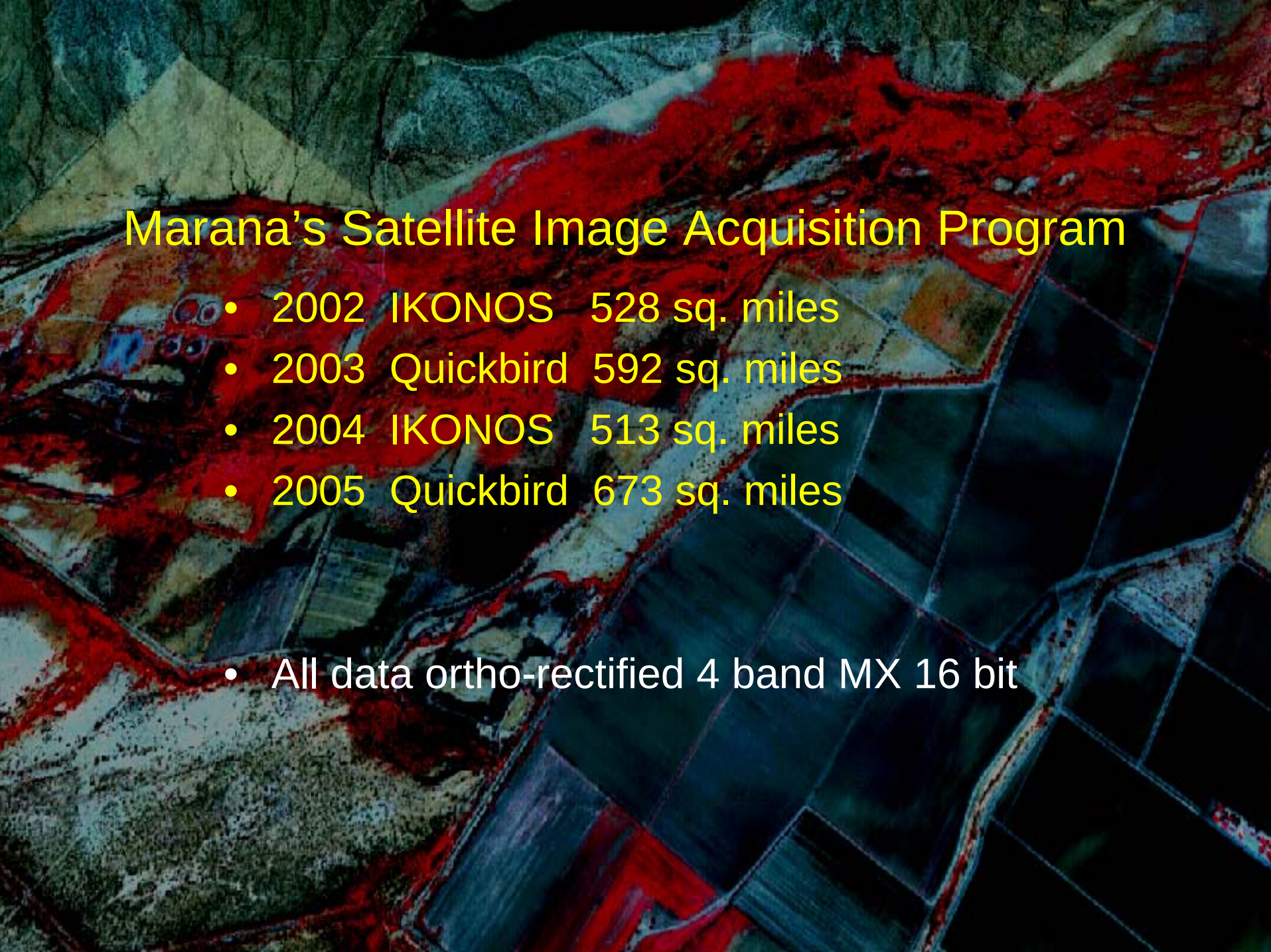
Chris Mack
TOWN OF
MARANA
ARIZONA
1977
Satellite Image Program
Solid Terrain Model
La Osa Site Overview (2002 – 2005)

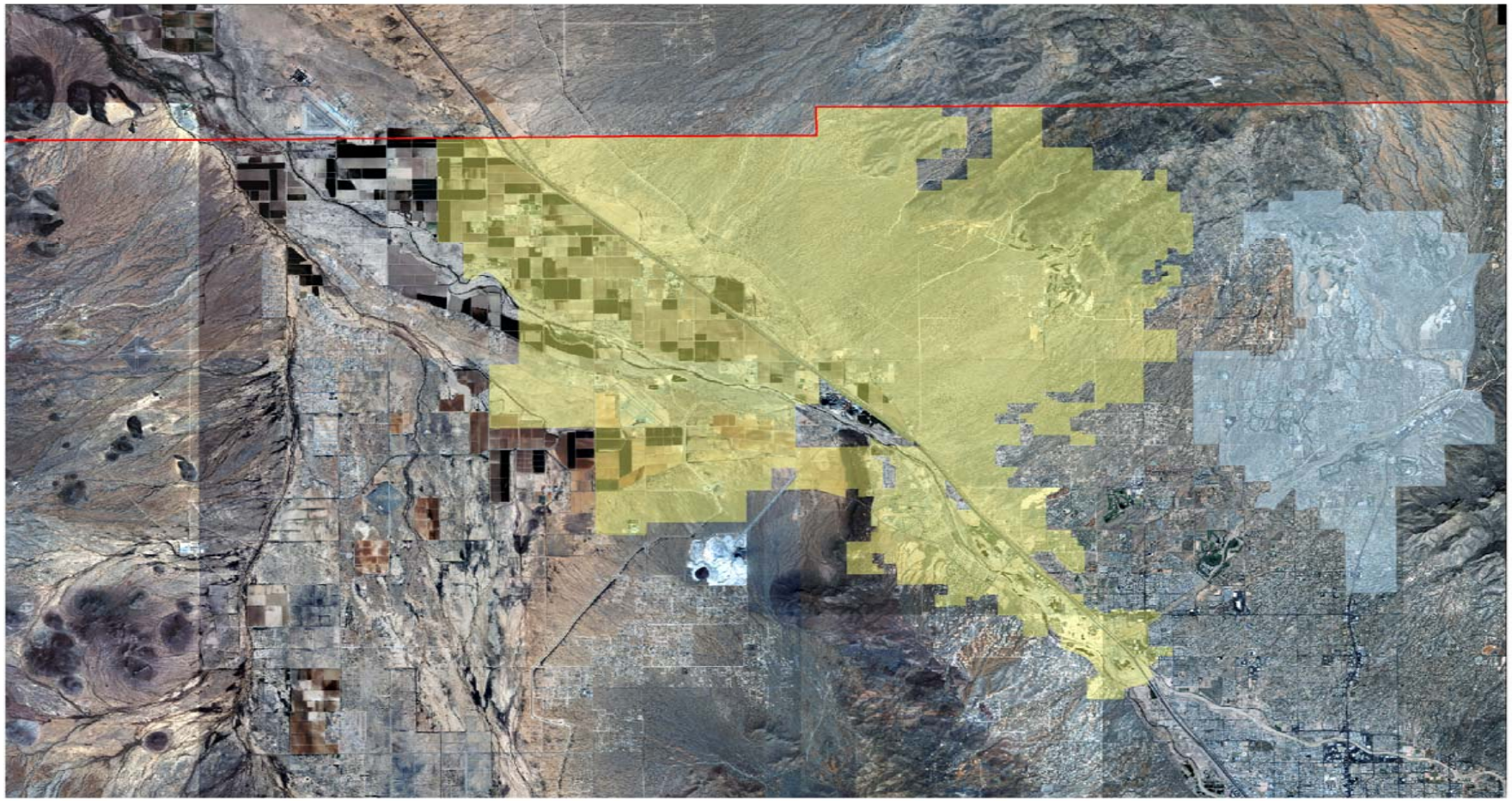


Marana's Satellite Image Acquisition Program

- 2002 IKONOS 528 sq. miles
- 2003 Quickbird 592 sq. miles
- 2004 IKONOS 513 sq. miles
- 2005 Quickbird 673 sq. miles

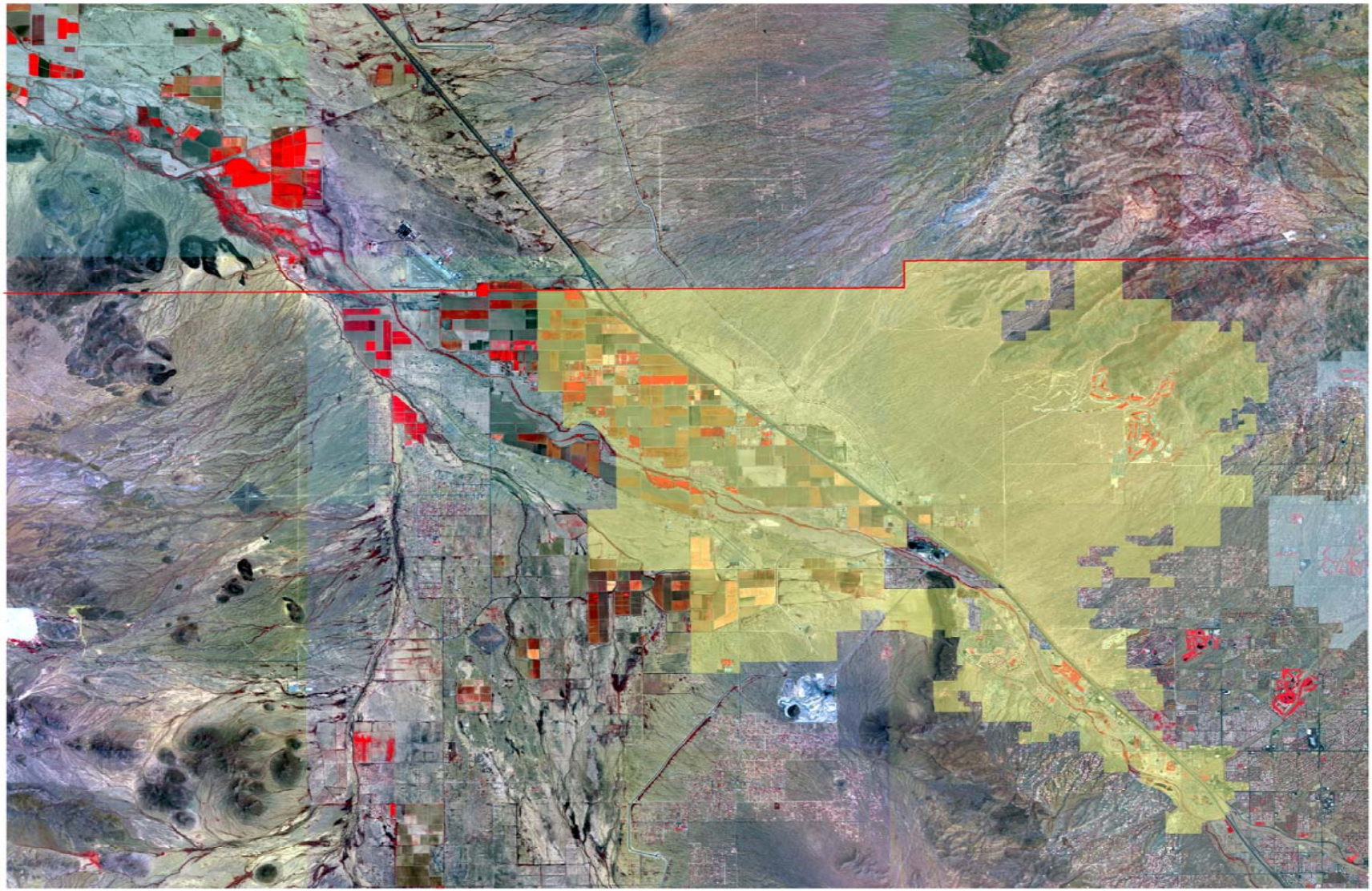
- All data ortho-rectified 4 band MX 16 bit

2002 IKONOS



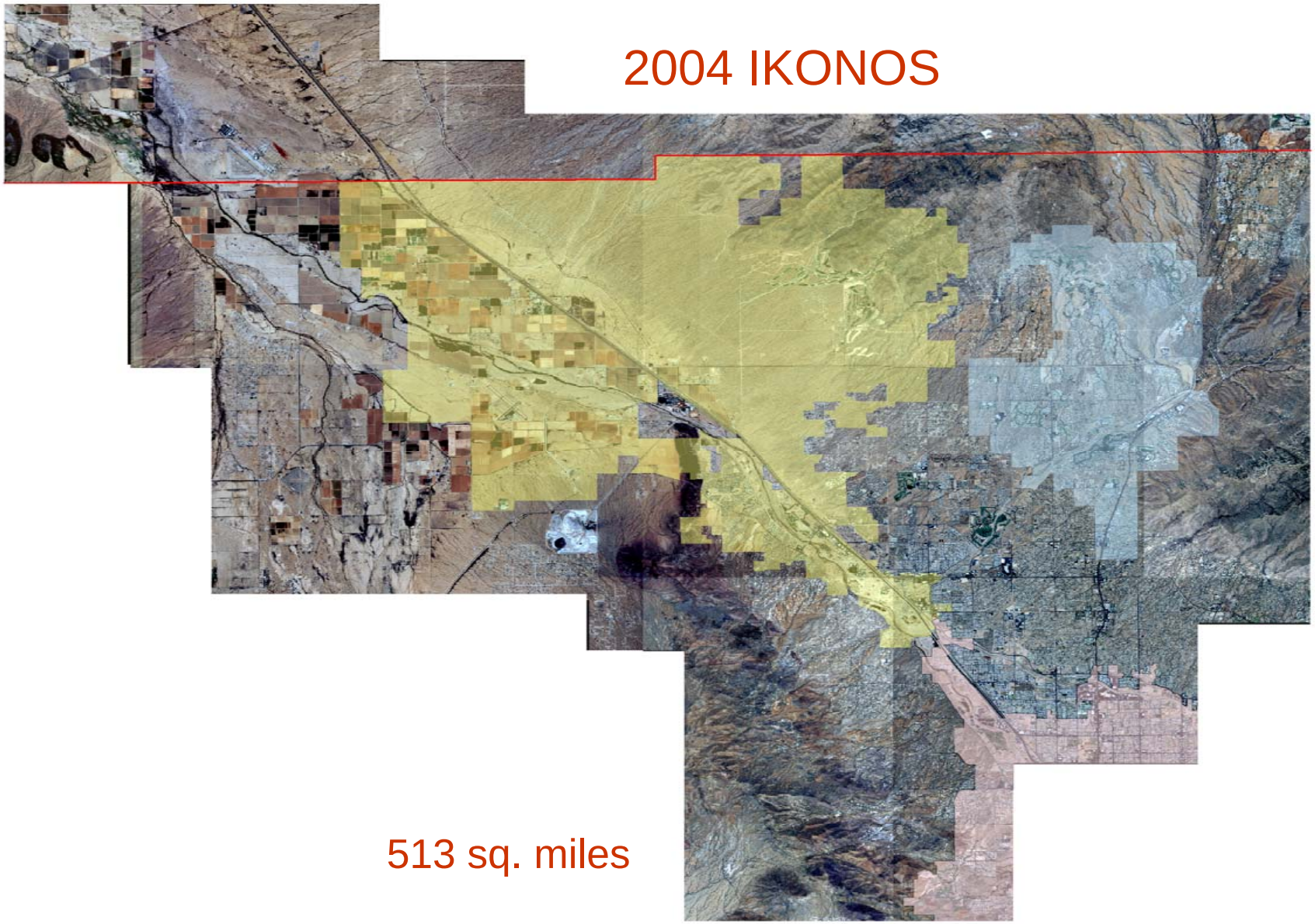
528 sq. miles

2003 Quickbird

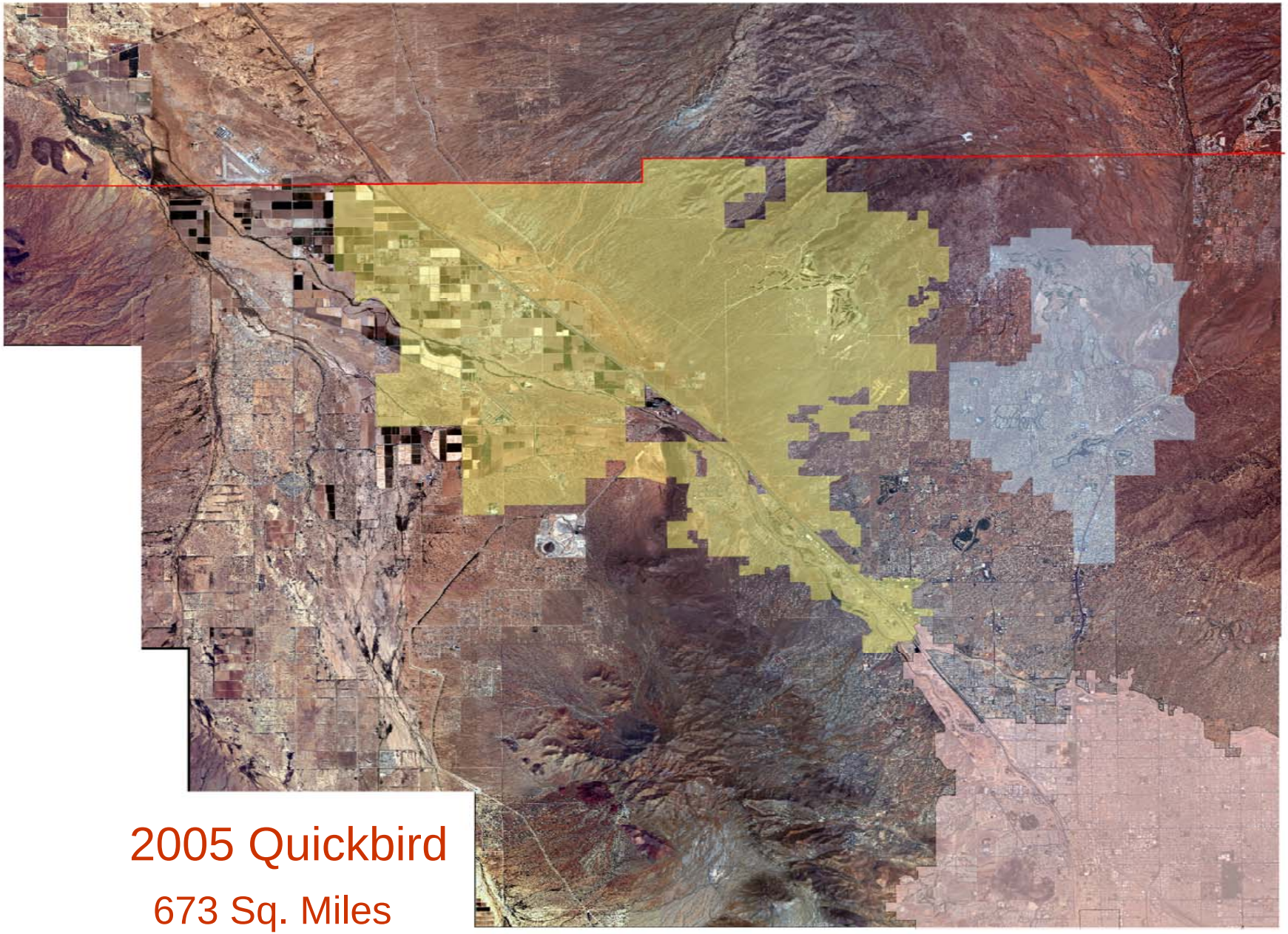


593 sq. miles

2004 IKONOS



513 sq. miles



2005 Quickbird

673 Sq. Miles

Future Image Acquisitions

- 2006 IKONOS? Quickbird?
- 2007, 2008 . . . new satellites in orbit

Marana 3D Model

- Physical dimensions 4’ x 5.5’
- 514 sq. miles
- 25,000 scale
- 2005 Quickbird 1.8 meter mosaic
- PAG/USGS DEM re-sampled to 25m

Extraordinary
Terrain Models For Museums

SOLID TERRAIN MODELING, INC.

STM

Model on Display
Marana Community Showroom
Administration Building
Marana Municipal Complex
11555 W. Civic Center Dr.
Marana

SANDARIO ROAD
LON ADAMS ROAD
BARNETT ROAD
MOORE ROAD
10
10

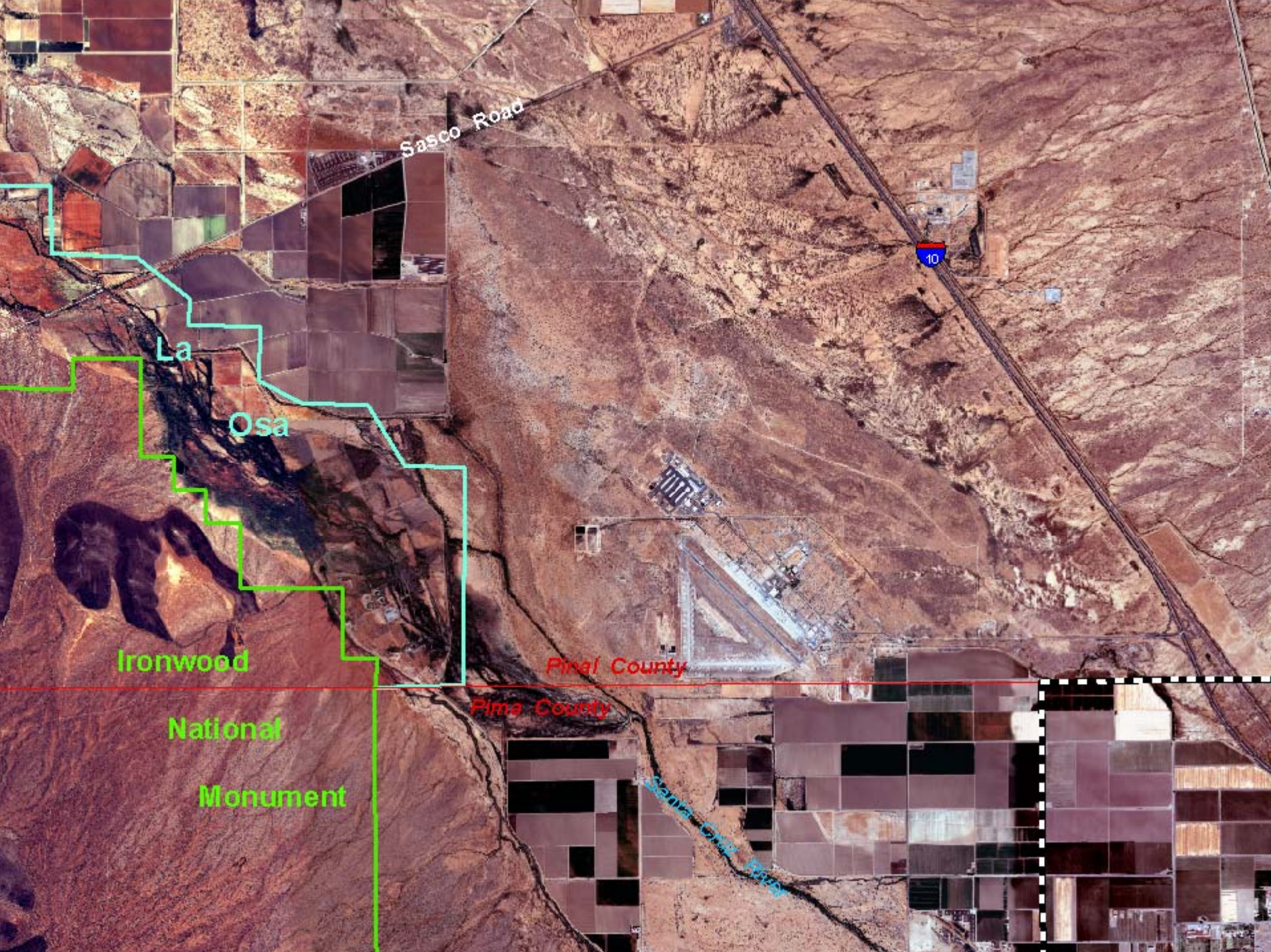
Damaged desert

> Satellite images of La Osa Ranch land north of Marana taken before and after a Scottsdale developer bladed the 2,000 acres show extensive damage. The state is suing him. <

PAGES 16-18

Jim Davis / Arizona Daily Star

Greened by winter rains, *this segment of the bladed land looks lush, but it's missing the myriad cacti and native shrubs that once flourished there.*


Sasco Road
10
La
Osa
Ironwood
National
Monument
Pinal County
Pima County
Santa Cruz River

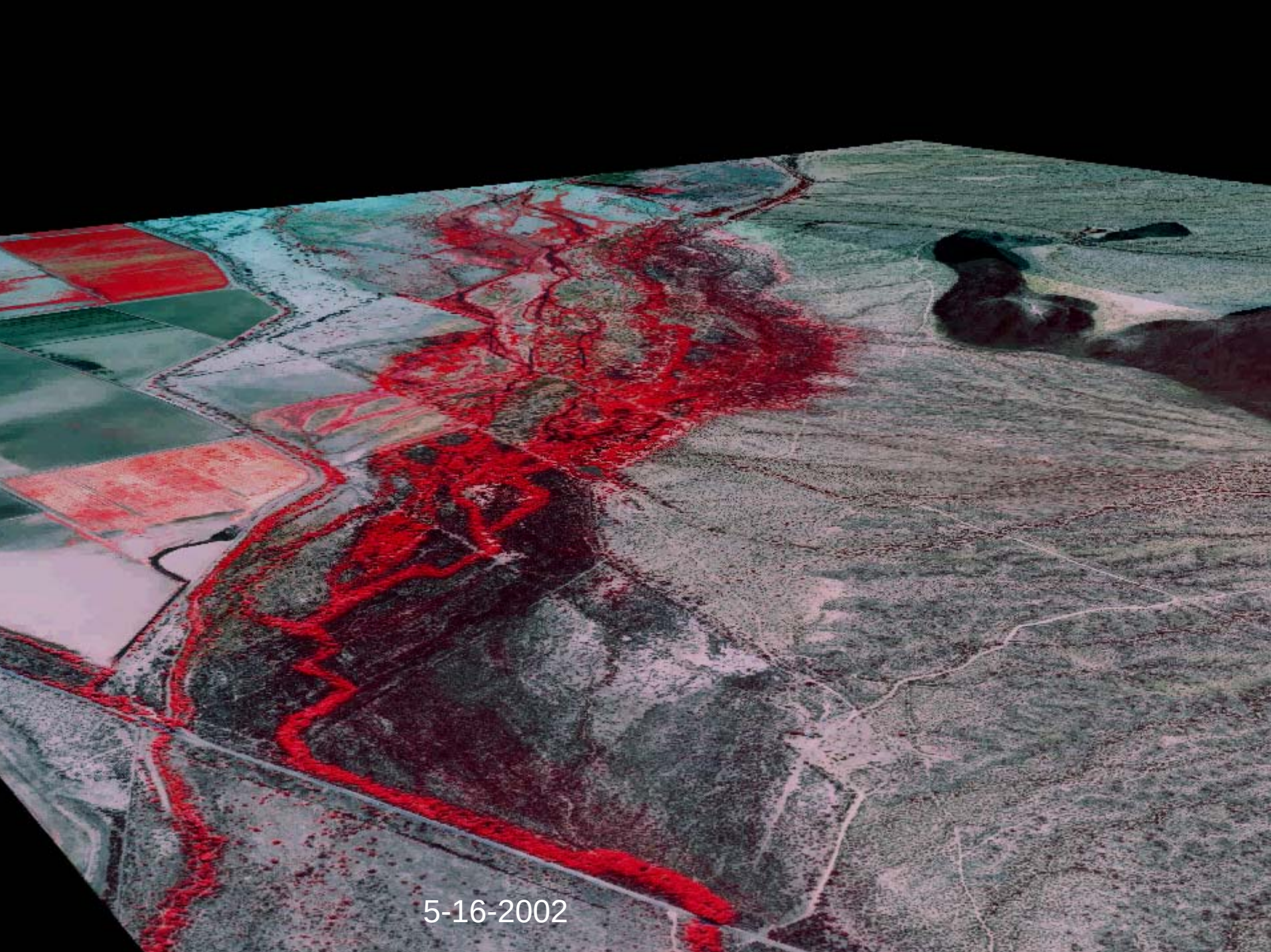
La Osa Development

- Proposed in 2003 (rezoning request - Pinal County Zoning Commission)
- 19,000 acres in size
- 67,000 new homes (175,000 people)
- Developer – George Johnson, Johnson International – Scottsdale AZ
- SE portion of proposed development 5 miles from Marana town limits

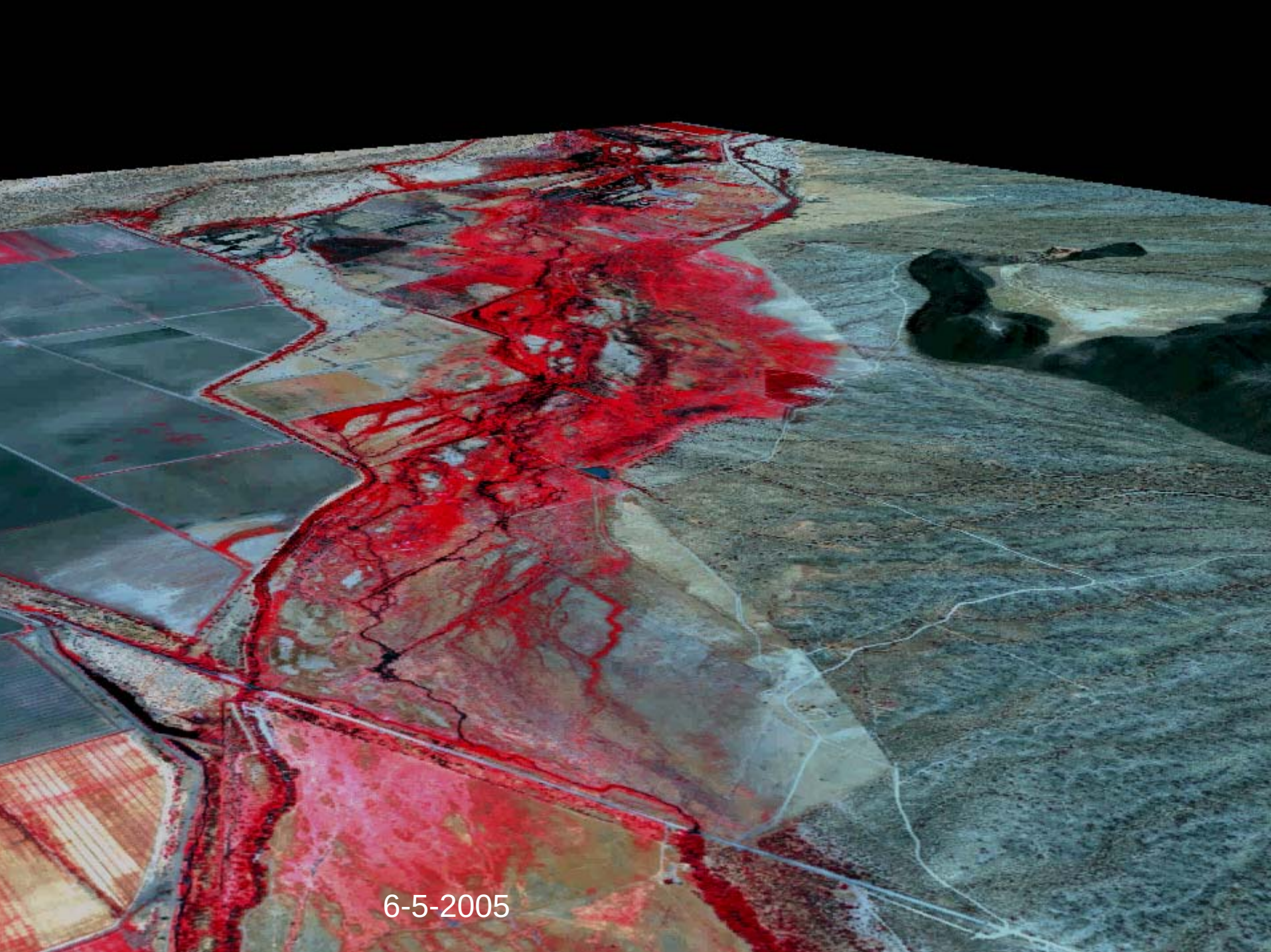
Environmental Impact

- ~ 2,000 acres land cleared
- ~ 270 acres of State land cleared
- ~ 7 Hohokam archaeological sites damaged
- Damage estimates > $9 million
- Developer claims land cleared for agricultural purposes

Developer’s goats caused eye virus epidemic that blinded at least 21 Desert Bighorn sheep in the Ironwood National Monument

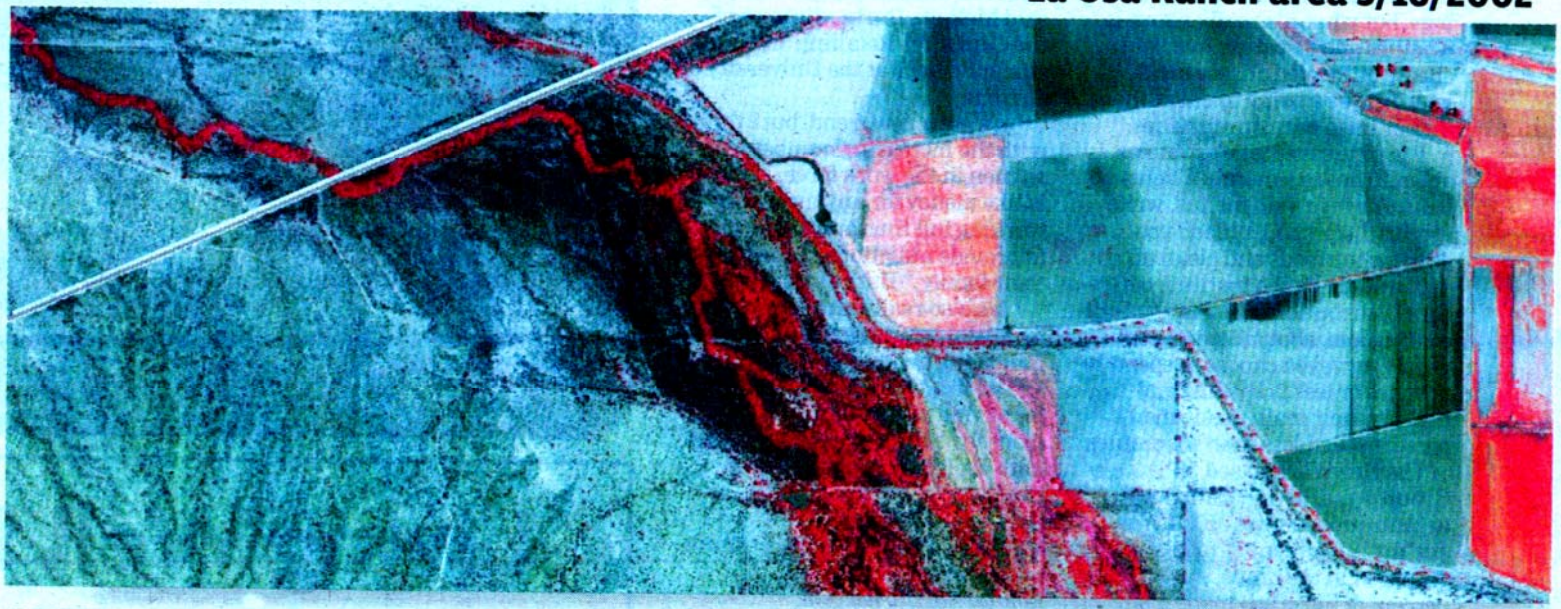

5-16-2002

5-21-2003


6-5-2005

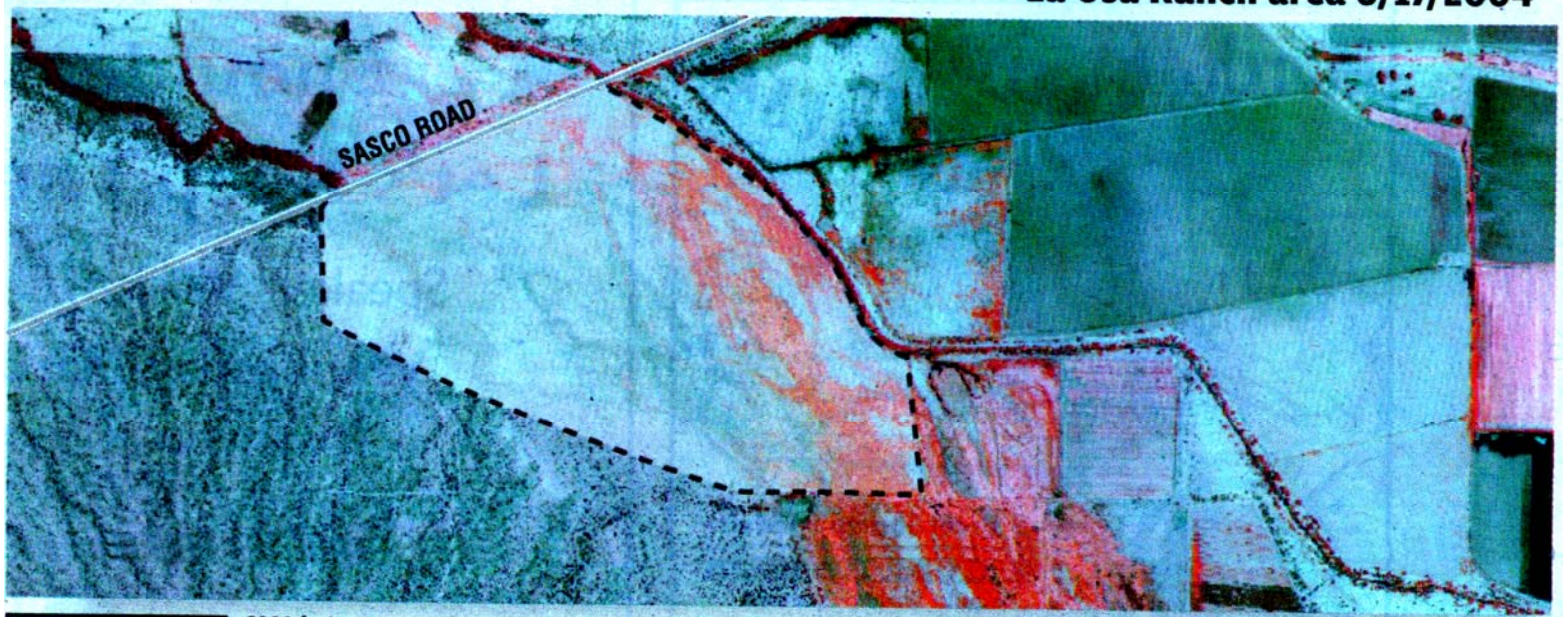
BEFORE

La Osa Ranch area 5/16/2002



AFTER

La Osa Ranch area 6/17/2004



Satellite imagery courtesy of the town of Marana and includes material @ Space Imaging LLC

Current Status

- Litigation currently in progress
- State of Arizona filed 29 page indictment against Johnson International in January 2004, Federal Indictment followed (US EPA)
- 16,000 acres of La Osa Ranch sold to another developer for $25 million – April 2004
- Satellite imagery to play key role in litigation by establishing time frame for land clearing activities