

Utah Animal Feeding Operations Air Quality Study

May 14, 2008

Bryce Bird

Utah Division of Air Quality

Utah's AFO/CAFO Program

- Since 1999 Utah has implemented a partnership approach in addressing environmental compliance issues at animal feeding operations.

EPA Agreement

- The Environmental Protection Agency (EPA) announced the Air Quality Compliance Agreement (Agreement) on January 21, 2005.

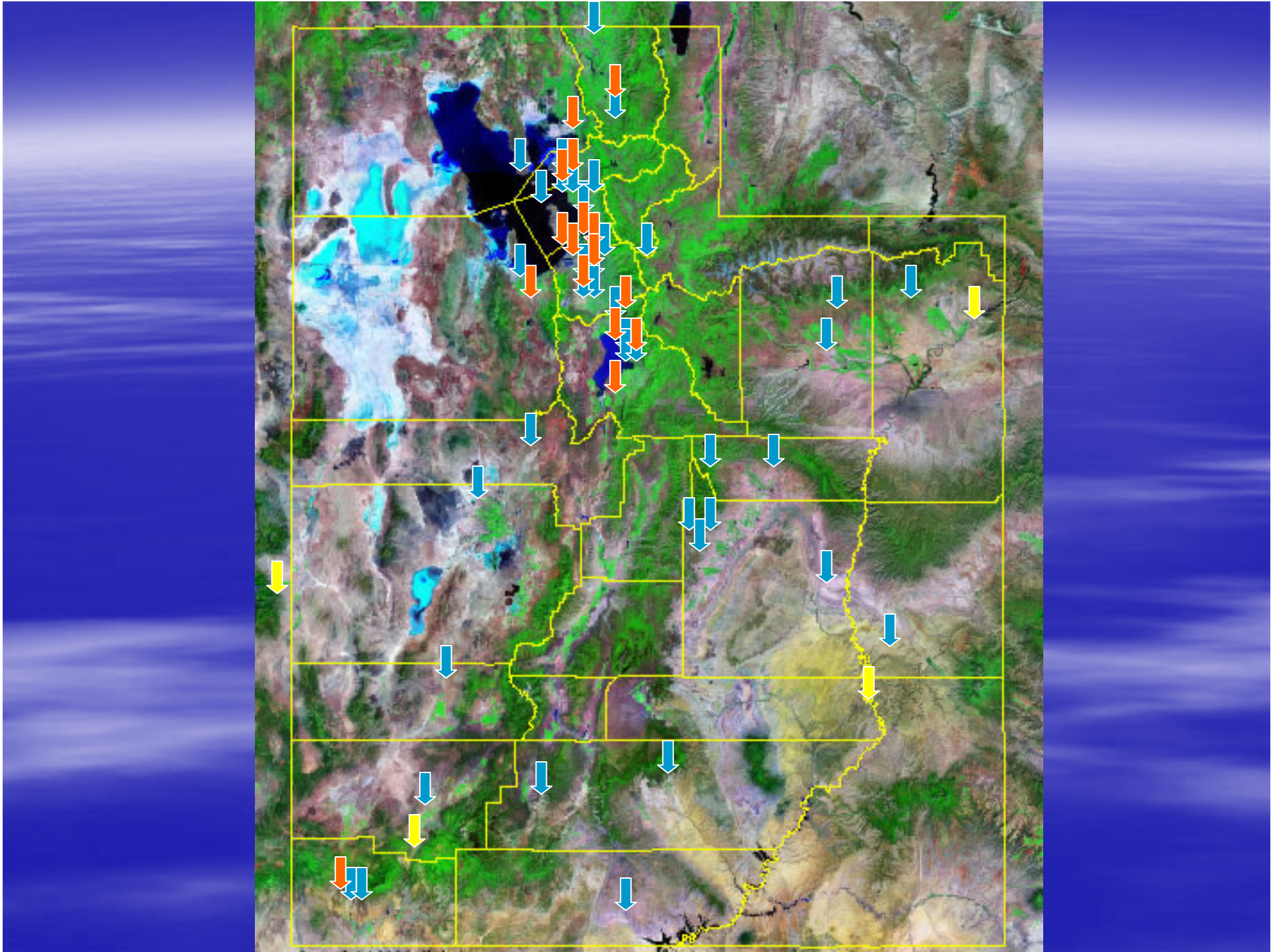
EPA Proposal:

Start with enforcement based action to fund monitoring

- Monitor 28 sites nationally
- Determine emission factors
- Calculate site emissions based on animal-units or other factors
- Determine compliance with CAA permitting (Operating Permits), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Emergency Planning and Community right-to-Know Act (EPCRA) reporting

Utah Position:

The proposed EPA Consent Order and Monitoring Plan was not the most efficient and appropriate means to address potential environmental impacts in Utah.



Utah Position:

No monitoring will occur in Utah or in any other rocky mountain state

- The proposed national monitoring may not be meaningful for arid farming
- There is no initial plan to reduce emissions, measure reductions, or determine Best Available Control Technologies (BACT) or Best Management Practices (BMP's)

UTAH/EPA MOU

- Memorandum of Understanding to establish a collaborative working relationship between the Utah Department of Environmental Quality (UDEQ) and the U.S. Environmental Protection Agency (EPA) to develop and implement the Utah Animal Feeding Operation Air Quality Strategy (AFO/AQS). The purpose of the AFO/AQS is to gather animal feeding operation (AFO) emission information and implement programs that achieve multiple environmental benefits.

FOR EPA

- The AFO/AQS will develop additional information useful and relevant in EPA's evaluation and creation of an animal agriculture air emissions program. Specifically, the AFO/AQS will provide:
 - Data from dry, arid regions
 - Data from very rural communities
 - Data of best management practices to reduce emissions

FOR EPA

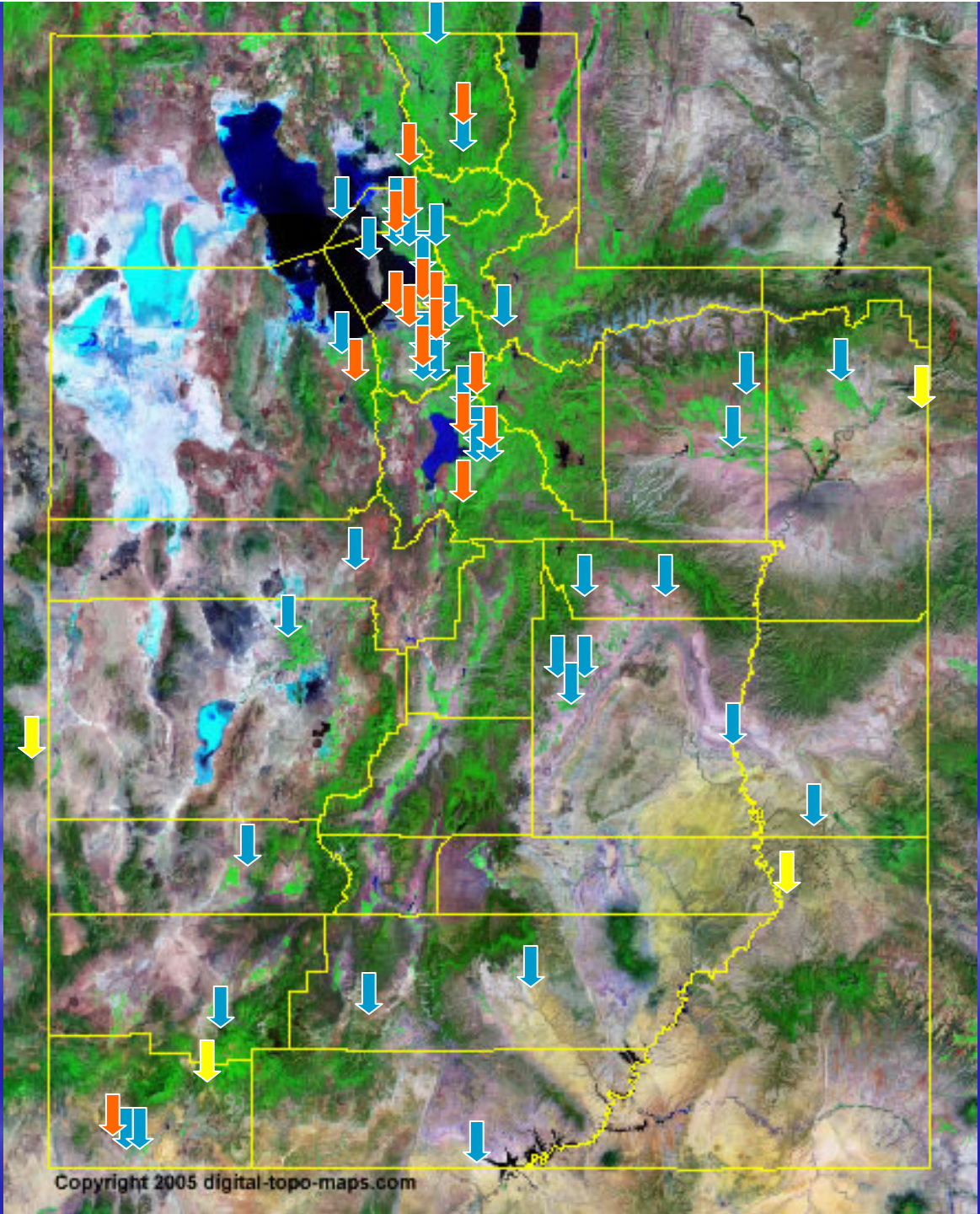
- Information on cooperative solutions
- ● It will provide a balanced approach between water and air pollution problems.
- ● It will provide alternative approaches for other states or areas to achieve emission reductions with the incorporation of best management practices (BMPs).
- ● It will provide information to help in the development of Best Available Control Technology (BACT).

FOR UTAH CITIZENS AND AGRICULTURE COMMUNITY

- Continues to build on the cooperative relationships and cooperative approach established in the water quality program.
- Reduces the stress on the agriculture community of a new demand on limited resources and new processes to comply with.
- Places a higher focus on local input and local solutions.
- Allows an evaluation on a cost/benefit basis of BMPs for reducing air emissions.
- Helps maintain a viable agriculture industry in Utah.

Results of the MOU

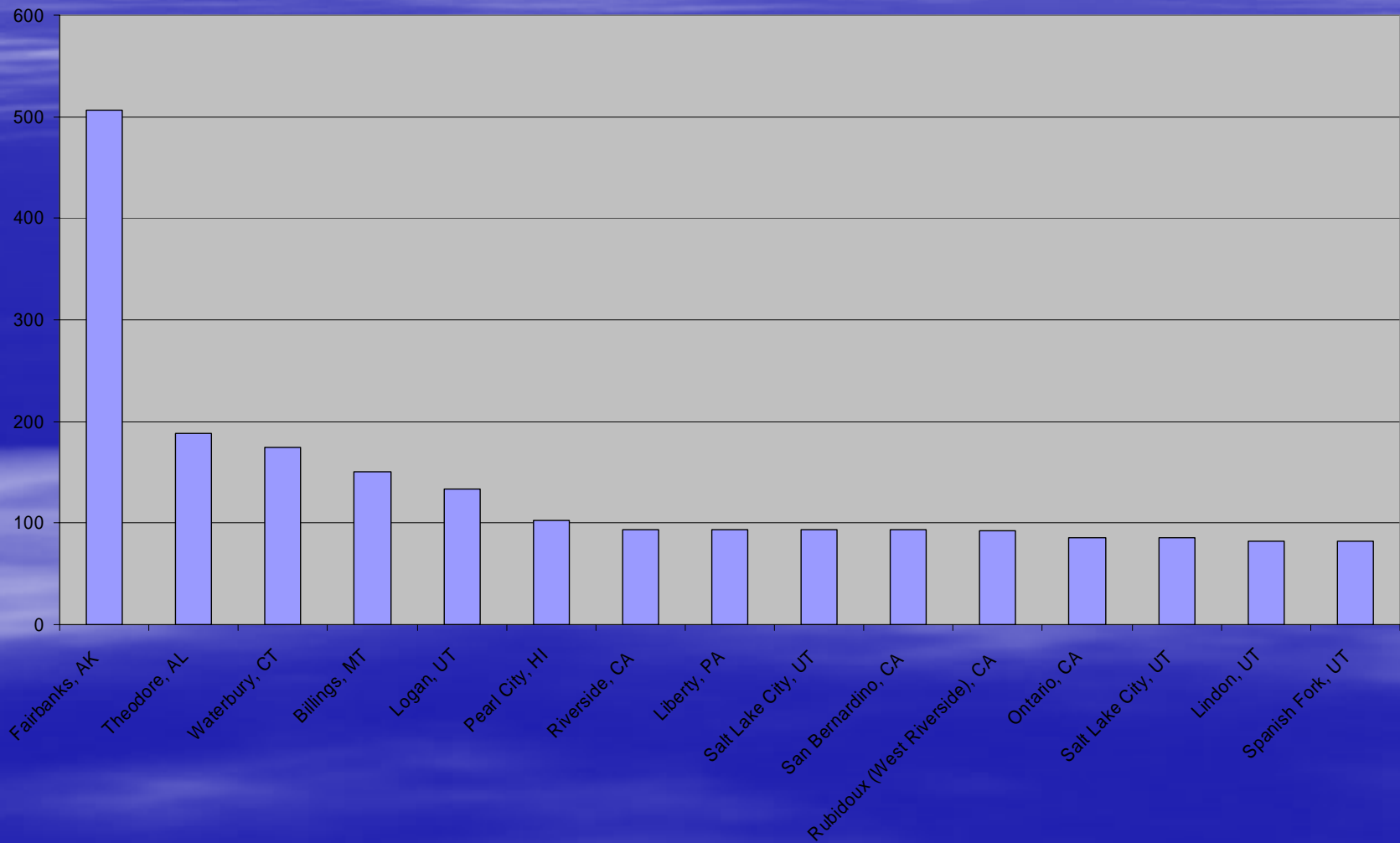
- Ensure compliance with applicable Clean Air Act, CERCLA and Environmental Planning and Community Right-to-Know Act (EPCRA) provisions
- EPA agrees that it will not target participants for inspection as a consequence of their participation in the Utah AFO/AQS.



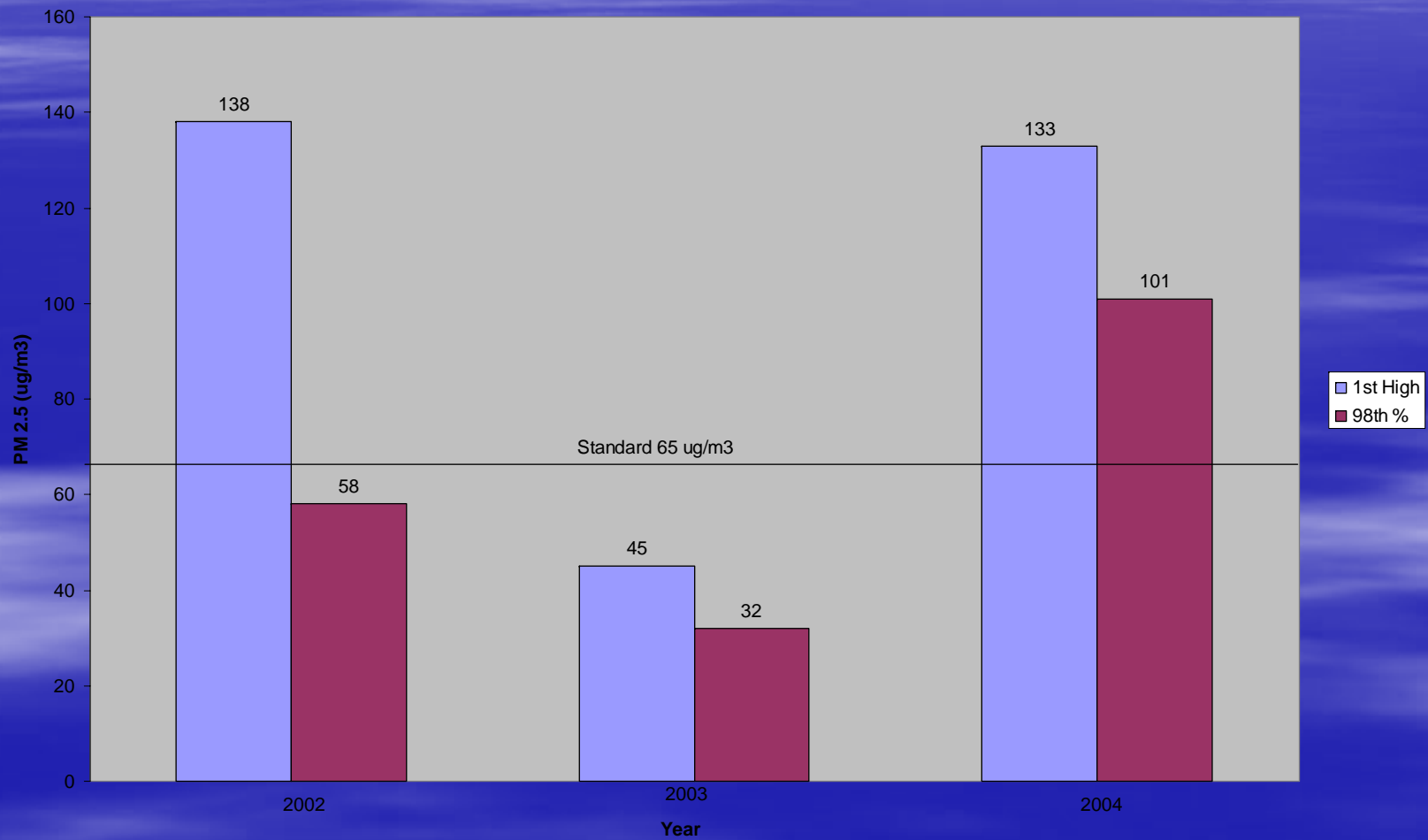
Copyright 2005 digital-topo-maps.com

Cache Valley Air Quality

PM 2.5 (ug/m3) Nation High Values



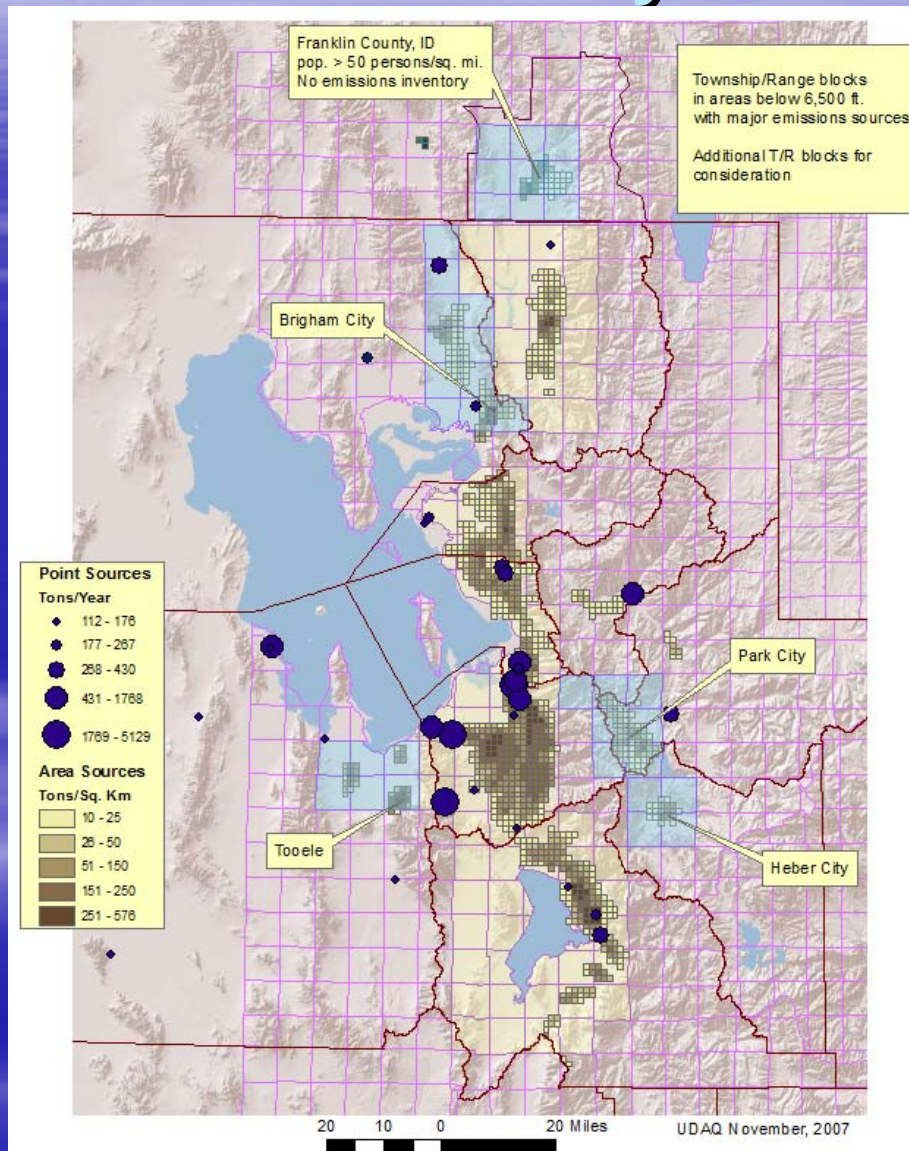
Cache Valley Air Quality

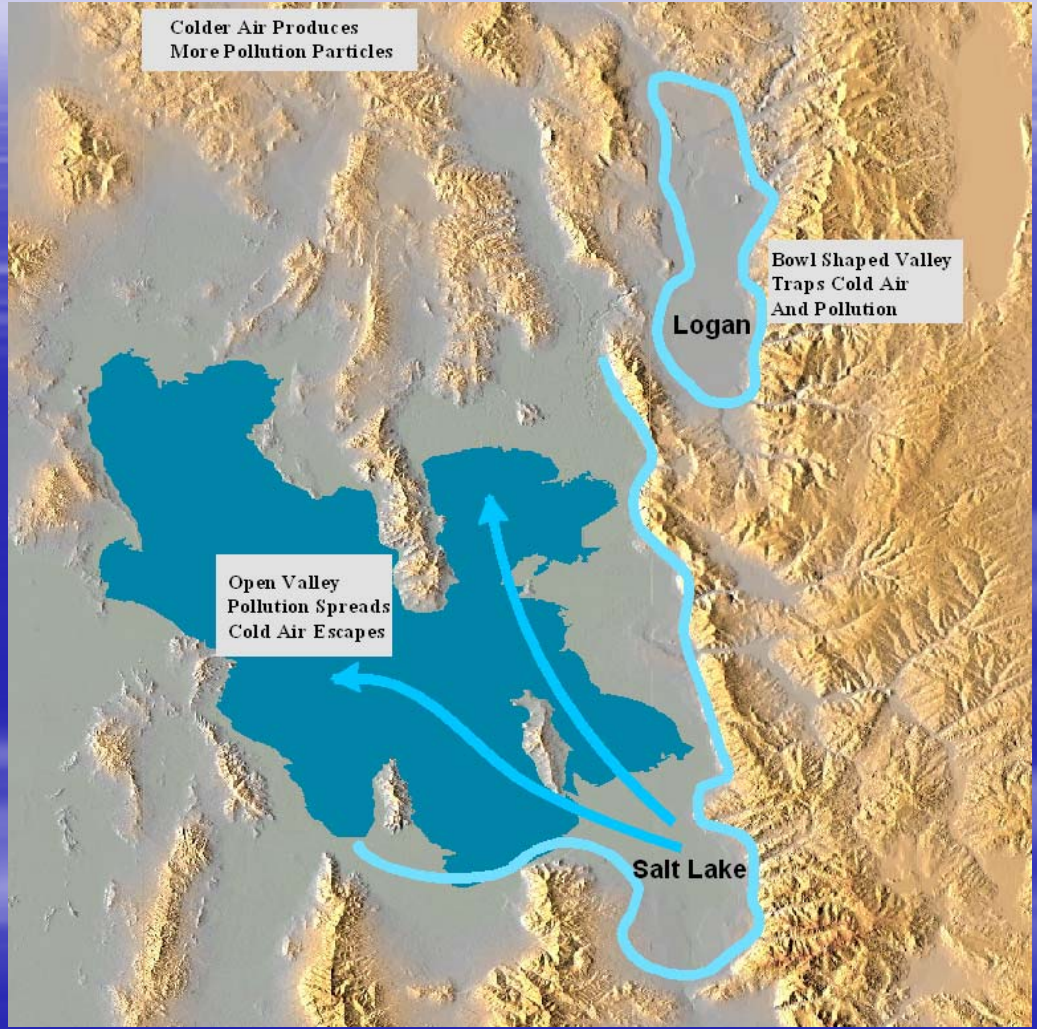






Cache Valley Air Quality

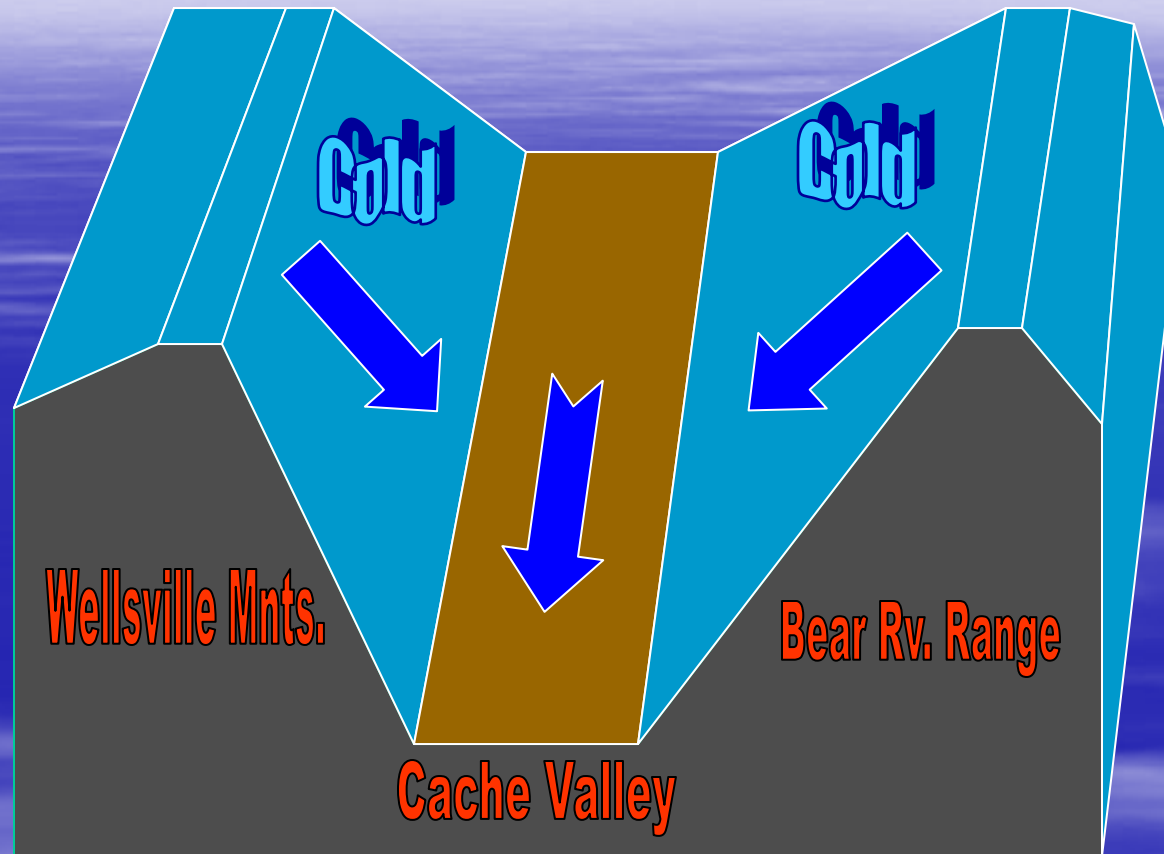




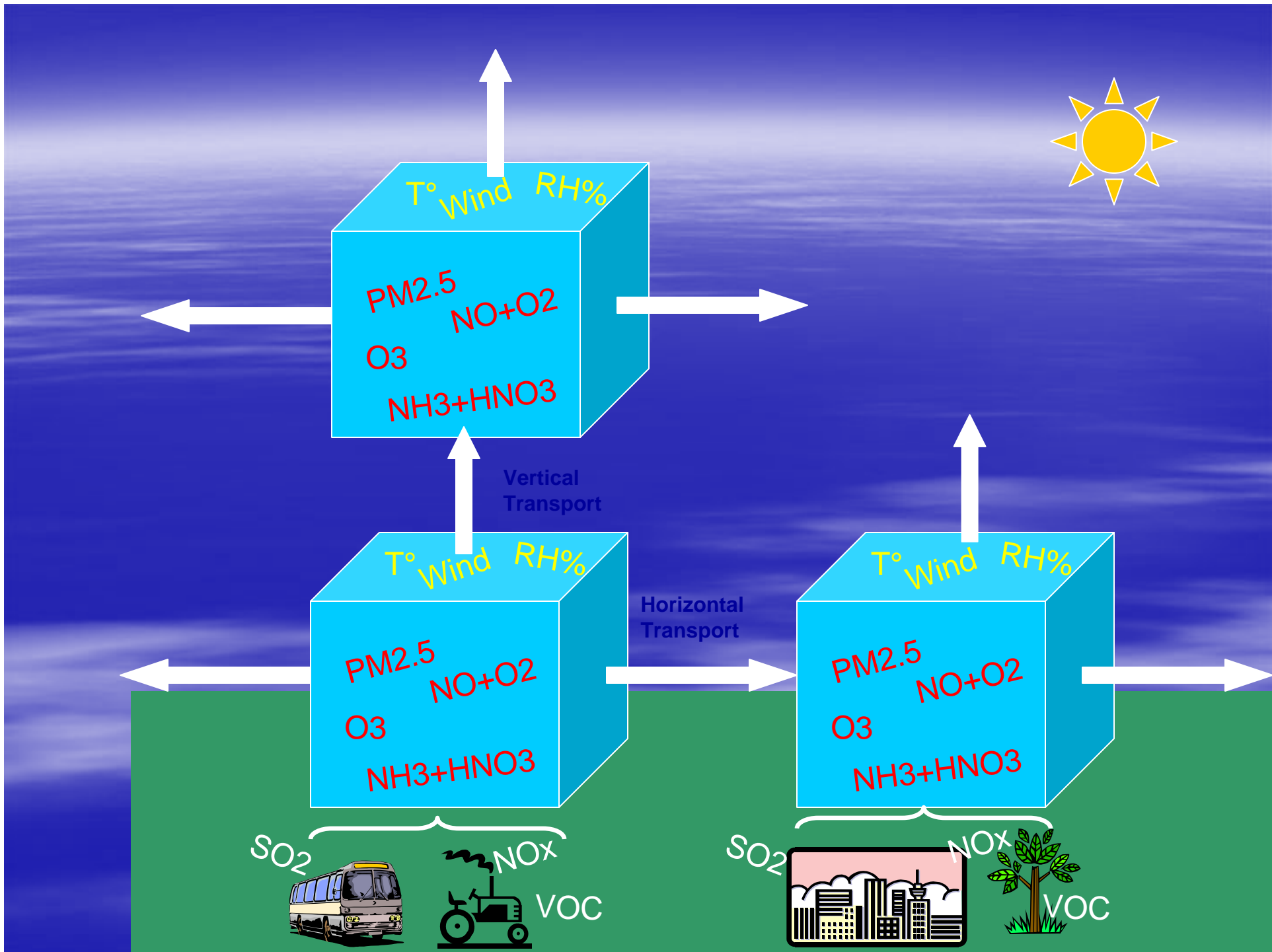
N



Nocturnal Mountain-Valley Cold Air Drainage

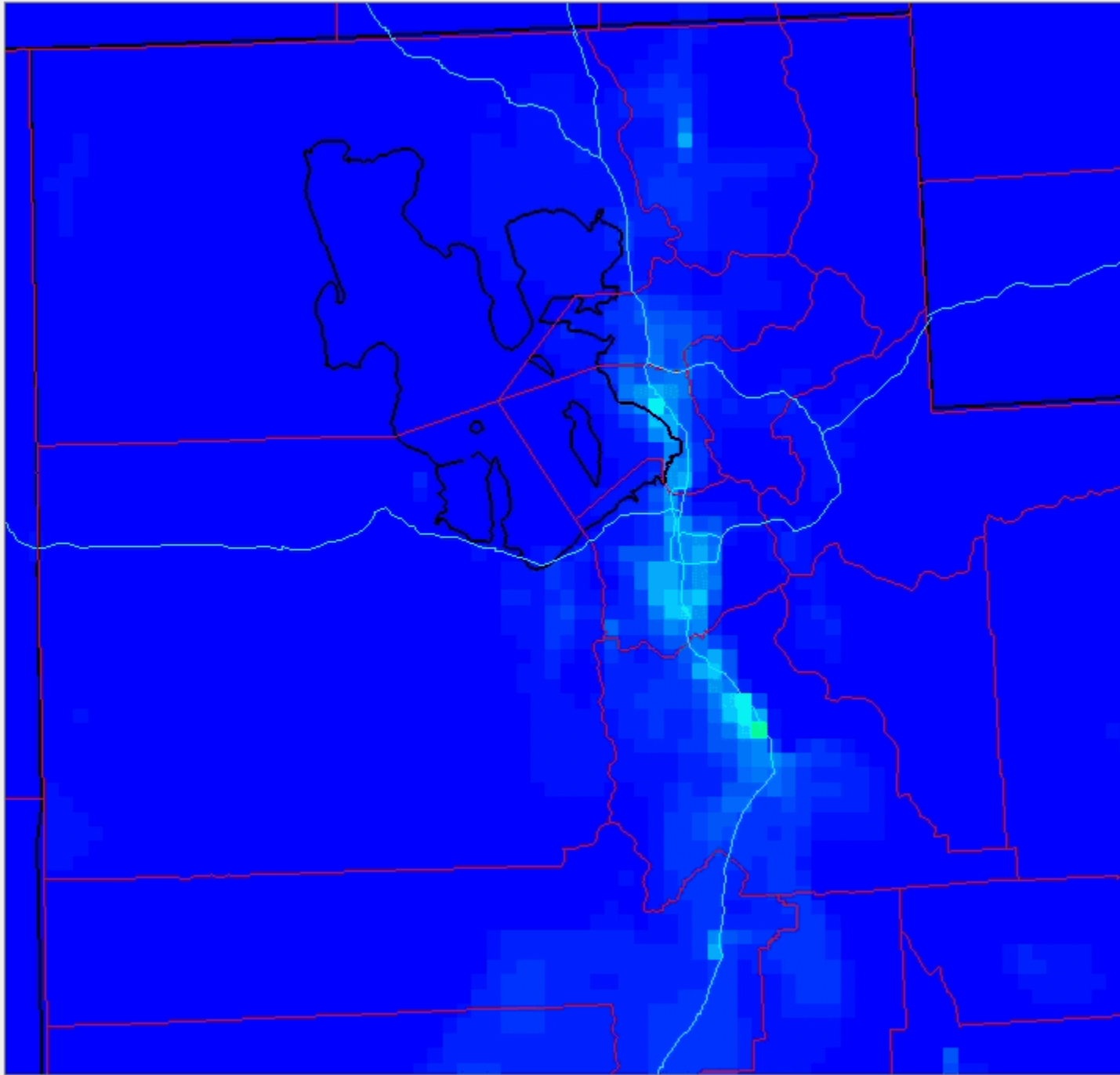


Clear skies promote surface cooling and cold air drainage from mountain slopes. The cold dense air collects and pools in valley bottoms such as the Cache Valley.



View Projections

2007-01-16 00:00:00Z



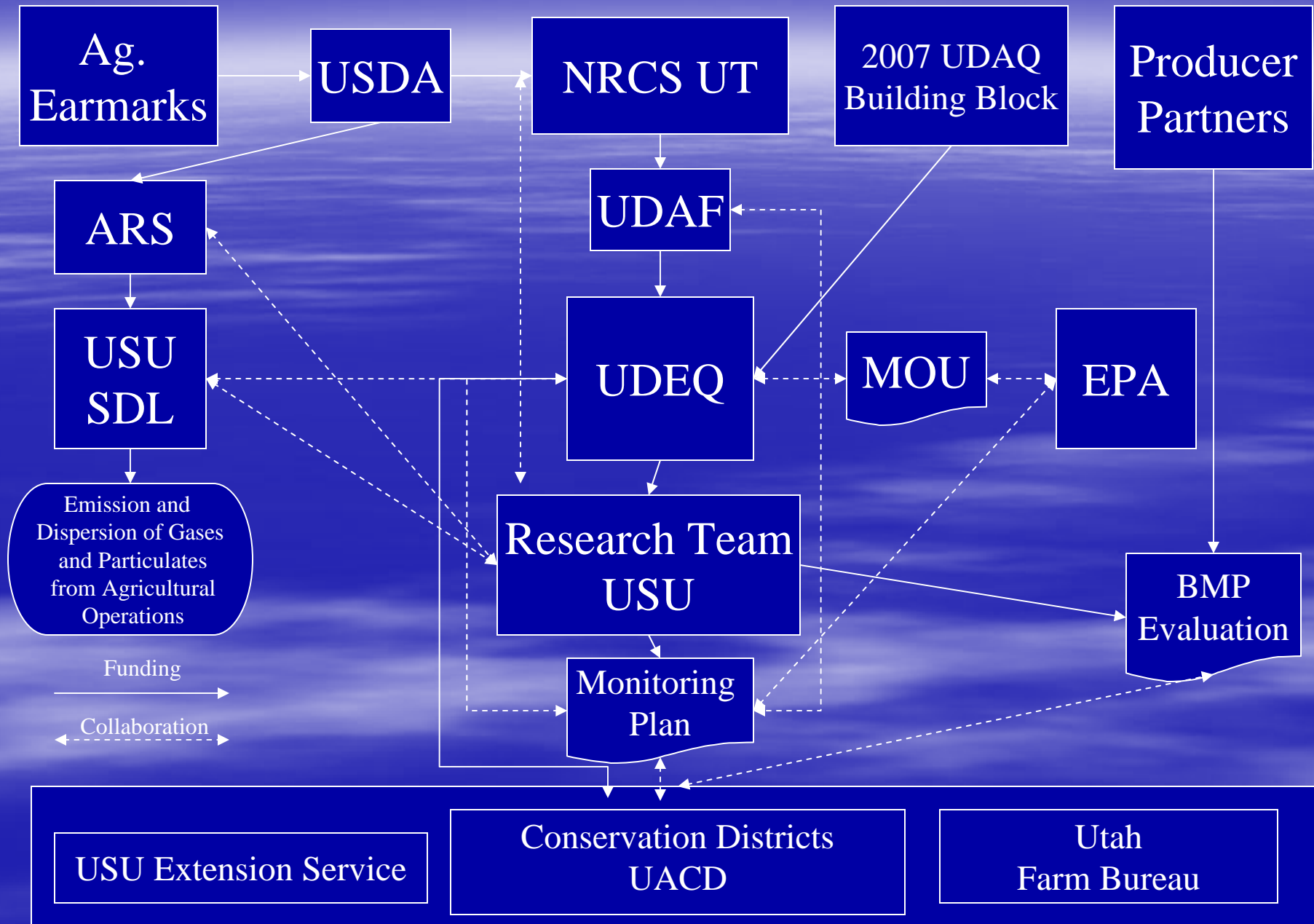
Displays

- Maps
 - [Default Background Maps](#)
 - World Coastlines
 - Hi-Res US
 - U.S. County Outlines
 - US Interstate Highways
- Plan Views
 - [PM2.5 Abbreviated - Color-Sh...](#)
Level: .0171 km
 - [PM2.5 Abbreviated - Color-Sh...](#)
Level: .0171 km
 - [PM2.5 Abbreviated - Color-Sh...](#)
Level: .0171 km
 - [PM2.5 Abbreviated - Color-Sh...](#)
Level: .0171 km

Progress

- Identify funding
- Develop monitoring plan
- Monitor emissions
- Evaluate Best Management Practices
- Assist with compliance

Utah Agricultural Emissions Research



Layer Study

