

Conceptual Model for Long-Term Fire Data

Inputs and process section(s)

Data Warehouse

A. Attributes

1. Flexibility
 - i. Multiple options at each step
 - ii. Ability to upload own data and examine supplied data
2. Transparency
 - i. No black boxes
 - ii. Links to documentation (literature, user guides, websites, etc.)
 - iii. Tracks metadata, i.e., no data presented that doesn't have metadata
3. Guidance
 - i. Guides a user through the steps in the process (provides a structure)
 - ii. Presents existing data or methods that may be unknown to user
4. Stability (Farren's idea)
 - i. Data and methods are stable enough across time so that multi-year comparisons can be made

B. Operations and Maintenance

1. Host site – [Intermountain West Data Warehouse](#)
 - i. March 3, 2021 high-level status report on IWDW and associated websites by WESTAR and CIRA
 1. [WESTAR \(Tom Moore\) modeling progress report presentation \(*.pptx\)](#)
 2. [CIRA \(Shawn McClure\) Air Data Mgmt. System / IWDW operations presentation \(*.pptx\)](#)
 3. See below for Figure 1 for architecture and Figure 2 for delivery websites
 - ii. WESTAR-WRAP Long-Term Fire Data website (LTFD – better acronym!?) would be added to CIRA ADMS portfolio
 1. Activities by CIRA
 - a. Hardware
 - b. Networking

- c. Software
- d. Develop and implement LTFD website
- e. Register and track users
- f. Track data uses and requests
- g. Report composition of website traffic for organizations / user types

iii. Staffing

1. CIRA LTFD implementation = 1.0 FTE, software engineer reporting to Shawn McClure
 - a. Annual cost, ongoing
 - b. Funding mechanism would be existing WESTAR-WRAP agreement with CSU/CIRA for IWDW and TSS operations and maintenance (20% indirect rate), add LTFD effort
 - c. Tom Moore to provide on-site facilitation and coordination at CIRA
2. Air Sciences' support for design assistance/calculations/QA via existing WESTAR contract
 - a. Greatest effort would be year 1 and taper back to a constant lower level of effort in year 2 and onward
 - b. Tom manages Air Sciences' contract with regular reporting to WESTAR-WRAP Fire & Smoke WG

Figure 1. CIRA Air Data Management System architecture

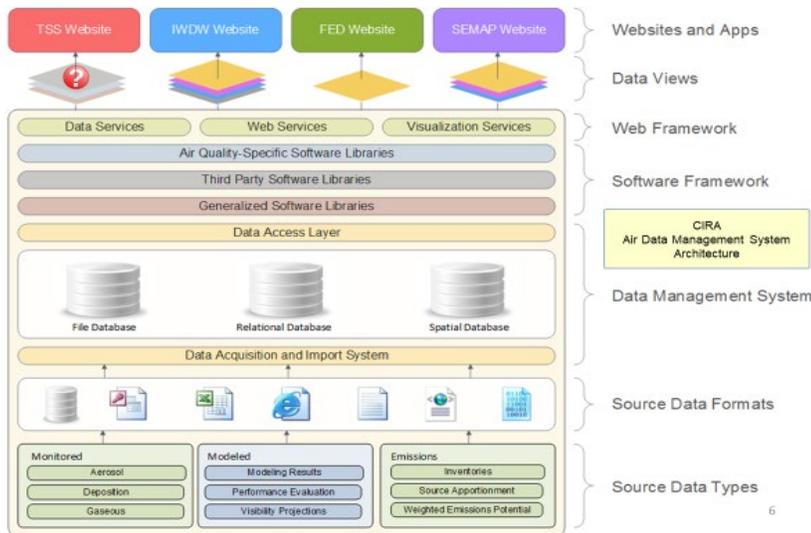


Figure 2. CIRA Air Data Management System ecosystem of website instances

