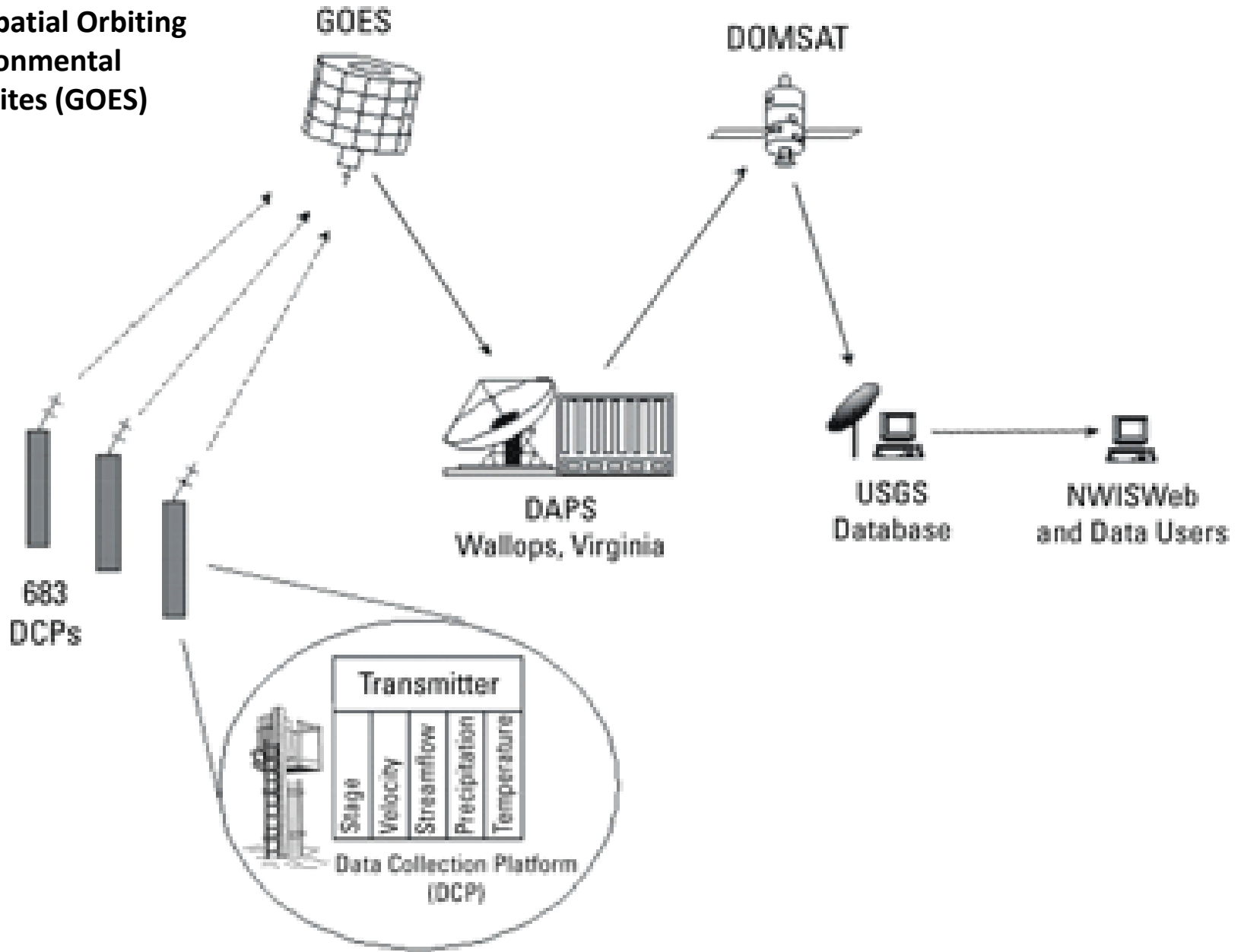


# Expanded private sector use of GOES radio spectrum

WSWC – July 14 2016

# Geospatial Orbiting Environmental Satellites (GOES)



# At issue

- Auction and expanded private sector use of radio spectrum adjacent to that now utilized by USGS to transmit and download water and meteorological data through GOES system
- Planned actions to expand private sector use of radio spectrum adjacent to what will be used in next-generation GOES satellites

# Concern

- expanded use may result in commercial signals that could “bleed over” and interfere with reception of USGS water data downlinked to the USGS Emergency Data Distribution Networks, NOAA downlinks and other federally owned ground stations
- New GOES downlink radio spectrum is currently under consideration for shared use with the private sector and could also experience interference from their networks.

# To date

- FCC regulations permit and provide funding for the USGS, NOAA, and other Federal agencies to establish interference-monitoring systems around our downlink facilities to detect the source of the interference and work with the generators to mitigate or possibly remove it.
- Next generation of GOES satellites are scheduled to become operational by early 2017. These GOES satellites will use frequencies located between 1679.7 – 1680.4 MHz, well away from the auctioned frequencies. However, some commercial entities have already expressed long-term interest in that spectrum as well.

# USGS take

- There is no expectation of near-term loss of GOES services
- USGS is exploring secure alternative means of transmitting and processing real-time water data from our field network gages, monitoring stations, and ground-water wells for the long-term
  - New solutions include private sector systems
  - New solutions will be more expensive than staying with GOES

# Stakeholder requests to FCC

- Enough time for complete communication with full range of those impacted
- Protection for the new GOES down link spectrum band
- Proving co-occupancy of spectrum will not interrupt downlink service