



WVEMD IFLOWS

INTEGRATED FLOOD OBSERVATION AND WARNING SYSTEM

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WEATHER RADAR / STREAM GAUGES

Introduction to IFLOWS

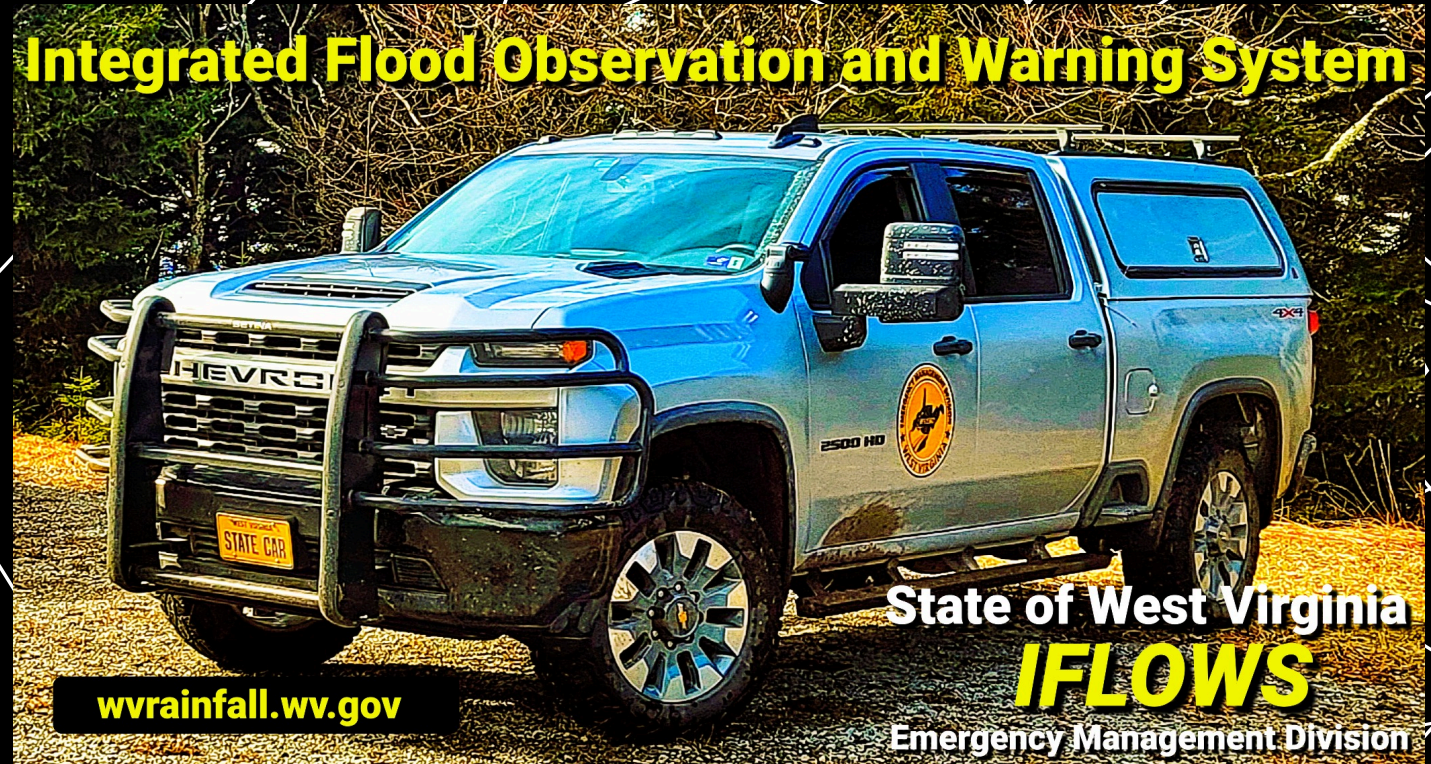
ClimaVision RADAR

Stream Gauge Additions

Conclusion

QUESTIONS / COMMENTS

Integrated Flood Observation and Warning System





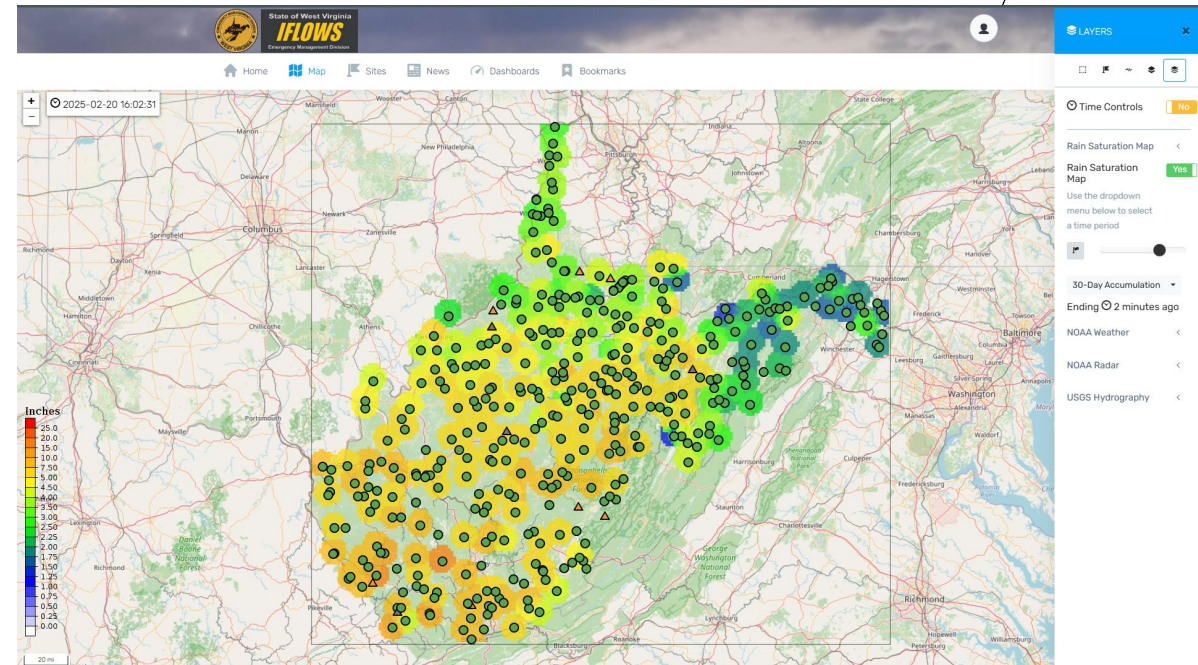
IFLOWS OVERVIEW

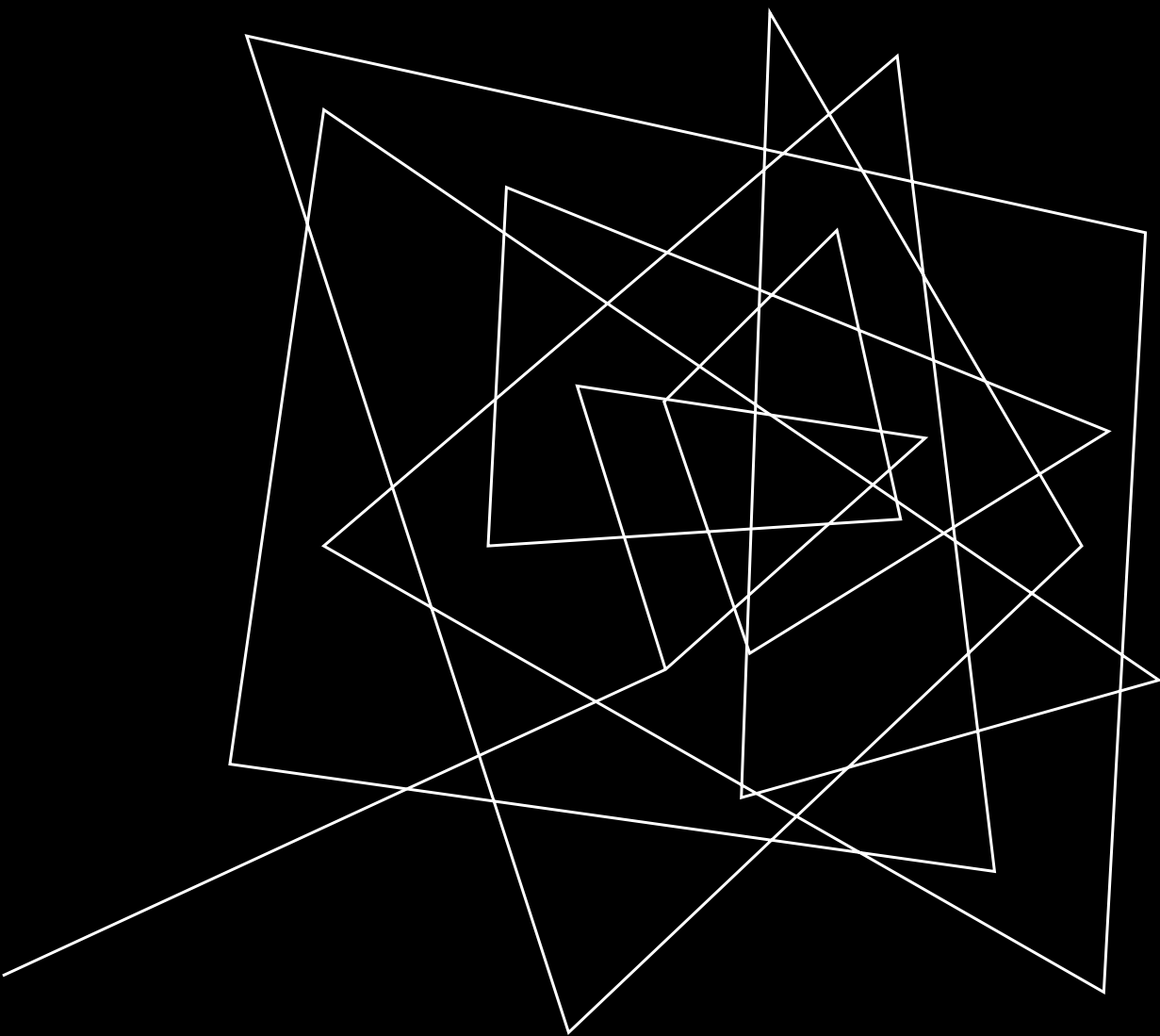


INTRODUCTION TO WVEMD IFLOWS

INTEGRATED FLOOD OBSERVATION AND WARNING SYSTEM

- System consists of 3 Collection Points- Coon, Romney, Wayne (Soon to be Added- Rich Mtn)- 237 Active Rain/Weather stations- VHF Radio telemetry- System Upgrade in process
- ONLY State Flood Warning System in the Country that is Fully Installed/Maintained by State Employees- One of the Largest in the Country
- Website – wvrainfall.wv.gov
- Local benefits of the website
- Post Event data acquisition for FEMA / Insurance claims (recent Flooding in West Virginia)





CLIMAVISION
WHAT IS IT ?

CLIMAVISION RADAR

Private Company

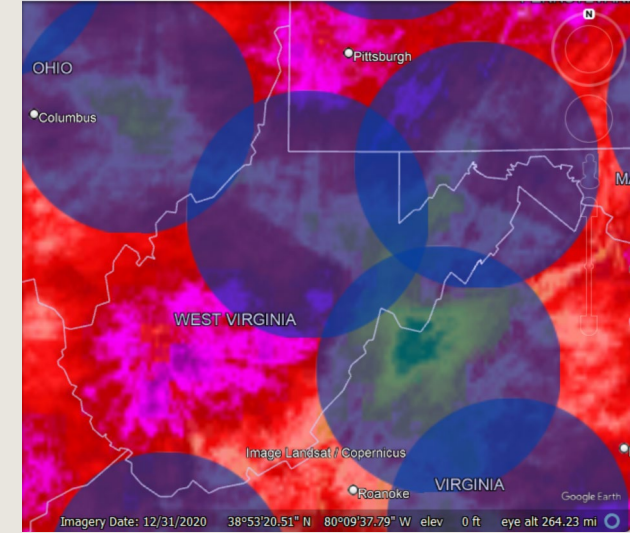
ClimaVision is a private company, building weather RADAR units and strategically placing them where the National Weather Service(NWS) RADAR is underperforming:

- Current COOP with the NWS
- Filling Low Level Data Voids

Local Benefits

Removes the costly infrastructure burden of owning, maintaining, and operating your own RADAR system and allows more entities to benefit from additional weather surveillance information

- App access 24 hours a day
- Scientific Data Analysis
- More accurate active, local weather RADAR
- Able to ACT instead of REACT



STREAM GAUGE ADDITIONS



Preparing Build Out

1. Locate streams of need
2. Receiving Requests from County OEMs
3. Prepare Site Specific Quotes

Why not use Current USGS Model ???

VERY COSTLY INSTALLATION AND YEARLY MAINTENANCE COSTS: \$2,500 to \$25,000 / year

- May take a multi year study to create NWS thresholds
- GOES Satellite Data Transmission Latency
- Equipment Owned/Maintained by a Federal Agency- Tax Payer \$\$\$

WVEMD IFLOWS- PLAN AND COST ESTIMATE

ONE Time cost to County for
Equipment Purchase***

WVEMD IFLOWS Technicians
Install/Maintain/Repair/Replace
Equipment throughout the
equipment lifespan

Custom Alarms and Warnings

Data displayed 24/7 at
wvrainfall.wv.gov

| Equipment | Estimated Cost | Yearly Cost to County | Customized to County Needs |
|------------------------------|----------------|---|----------------------------|
| Simple Stream gauge/Cellular | \$3200-\$4900 | \$155-\$225/data*** (Possibly Lower) | 100% |
| Simple Stream VHF-WVEMD | \$6400 | \$0 | 100% |
| Simple Stream Iridium Sat. | \$5000-\$6400 | \$650*** | 100% |
| Quotes In Hand Today | | Cellular Plan depends on Manufacturer | |
| | | | |

CLOSING STATEMENT



ClimaVision Project

- Preliminary Stage of Development
 - Concept and Planning
- Cost \$\$\$
 - Dependent on # of Local and State Partners signed up- No Cost Estimates at this time
- Beneficial??
 - Are you interested in further discussion?

Stream Gauge Addition

Enhanced Warning

Local Customization

County picks the sites of need

County Reimburses WVEMD for Equipment Cost

Cellular/Iridium Sat. Data- possible County responsibility, but still working to eliminate or reduce cost of this option- VHF NO COST to County



THANK YOU

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