



Impact-Based Warnings (IBW)

- **All National Weather Service Severe Thunderstorm Warnings, Tornado Warnings, and Flash Flood Warnings contain Impact-Based Warning tags, which contain information describing the following:**
 - *The hazard type(s) expected*
 - *The source of the expected hazard(s) - (Radar Indicated, Observed)*
 - *The impacts expected from the hazard(s) - (Base/No Tag, Considerable, Destructive/Catastrophic)*
- **The goal of this information is to improve communication of valuable hazard information to decision makers, the media, and the public, in order to improve response and better meet societal needs in the most life-threatening weather events.**
- **The following slides describe the IBW tag thresholds for each warning type, and whether they will trigger a Wireless Emergency Alert (WEA) activation. Upgrades to the highest category (Destructive/Catastrophic) require issuance of a new warning, while this is optional with upgrades to the Considerable category.**

Thunderstorm Damage Threat	Wind	Hail Diameter	WEA?	New Warning Required w/ Upgrade?
Base (no tag; default)	58 mph	1.00" U.S. Quarter	No	-
Considerable	70 mph	1.75" Golf Ball	No	Optional
Destructive	80 mph	2.75" Baseball	Yes	Yes

Tornado Damage Threat	When to use:	WEA?	New Warning Required w/ Upgrade?
Base (no tag; default)	Use <u>most of the time</u> , when tornado damage possible within the warning polygon. Tornado duration generally expected to be short-lived.	Yes	-
Considerable	Use <u>rarely</u> , when there is credible evidence that a tornado, capable of producing considerable damage, is imminent or ongoing. <u>Long lived</u> tornado duration generally expected.	Yes	Optional
Catastrophic	Use <u>exceedingly rarely</u> , when a severe threat to human life and catastrophic damage from a tornado is occurring, and will only be used when reliable sources confirm a violent tornado. <u>Long lived</u> tornado duration generally expected.	Yes	Yes

Flooding Damage Threat	When to use:	WEA?	New Warning Required w/ Upgrade?
Base (no tag; default)	Use most of the time, when flash flood impact damage is possible.	No	-
Considerable	Use <u>rarely</u> , when there are indications flash flooding capable of unusual severity or impact is imminent or ongoing and urgent action is needed to protect lives and property.	Yes	Optional
Catastrophic	Use <u>exceedingly rarely</u> , when a flash flood threat to life and catastrophic damage is occurring or is imminent, and floodwaters have risen or will rise to levels rarely, if ever, seen.	Yes	Yes