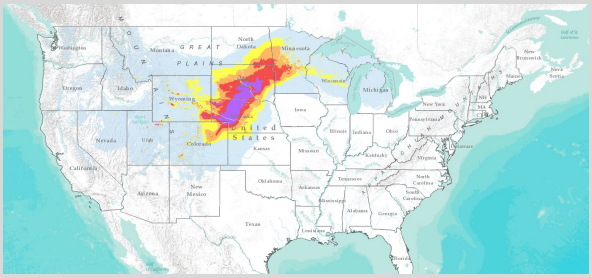

Winter Storm Severity Index – Alaska Anchorage WFO

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Focus Group Agenda

Introduction to the Project and Introduction of all Participants

Pre-session survey

Scenario

Post-session survey

Southcentral Winter Storm
T-3
Wednesday

National Weather Service Anchorage, AK @NWSAnchorage

The weather impact level for Friday and Saturday is: **Moderate**

Key Points:

- Significant Uncertainty Regarding Precipitation Types Friday into Saturday
  - Snow will begin Thursday night from south to north.
  - Warmer air moves in Friday morning resulting in transition from south to north of snow over to rain.
  - During that transition, there could be a period of freezing rain across much of Southcentral, however the timing and the details are still uncertain.
- Slick Conditions possible Friday into Friday night for much of the area
  - Rain falling on frozen surfaces will cause slick conditions even where temperatures rise a few degrees above freezing, which will be worsened in areas that get a period of freezing rain during the transition from snow to rain.
  - Higher elevations are likely to see a smoother transition from snow to rain from south to north.
  - Gusty winds through Turnagain Arm, Knik Arm, and through the Copper River Basin are likely to help minimize the chances of freezing rain in those areas, though rain falling on frozen surfaces in these areas are still likely to cause very slick conditions.

Confidence:

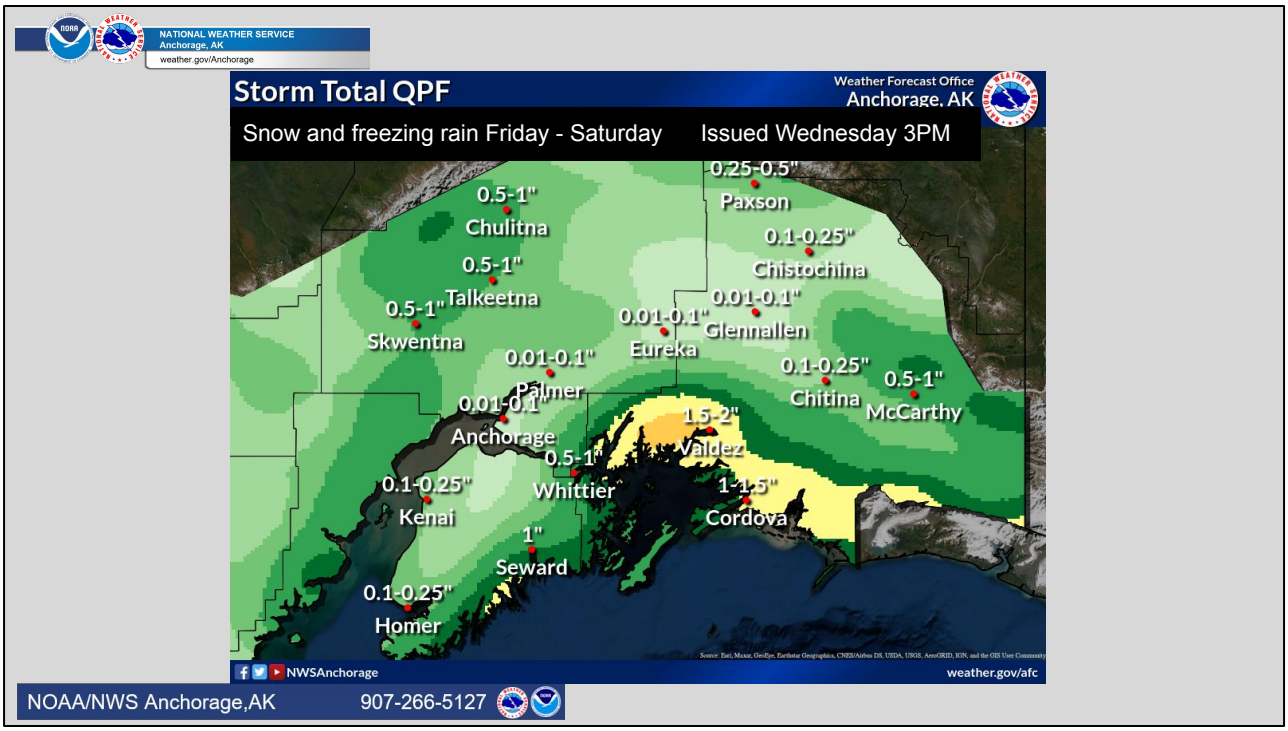
High- Precipitation is expected starting Thursday night, moving in from south to north, beginning as snow, transitioning over to rain generally from south to north, though more quickly in the southeasterly gap wind areas from Friday through Friday night.

Low- The timing of transition from snow to rain. Whether any freezing rain will mix in and if so, for how long.

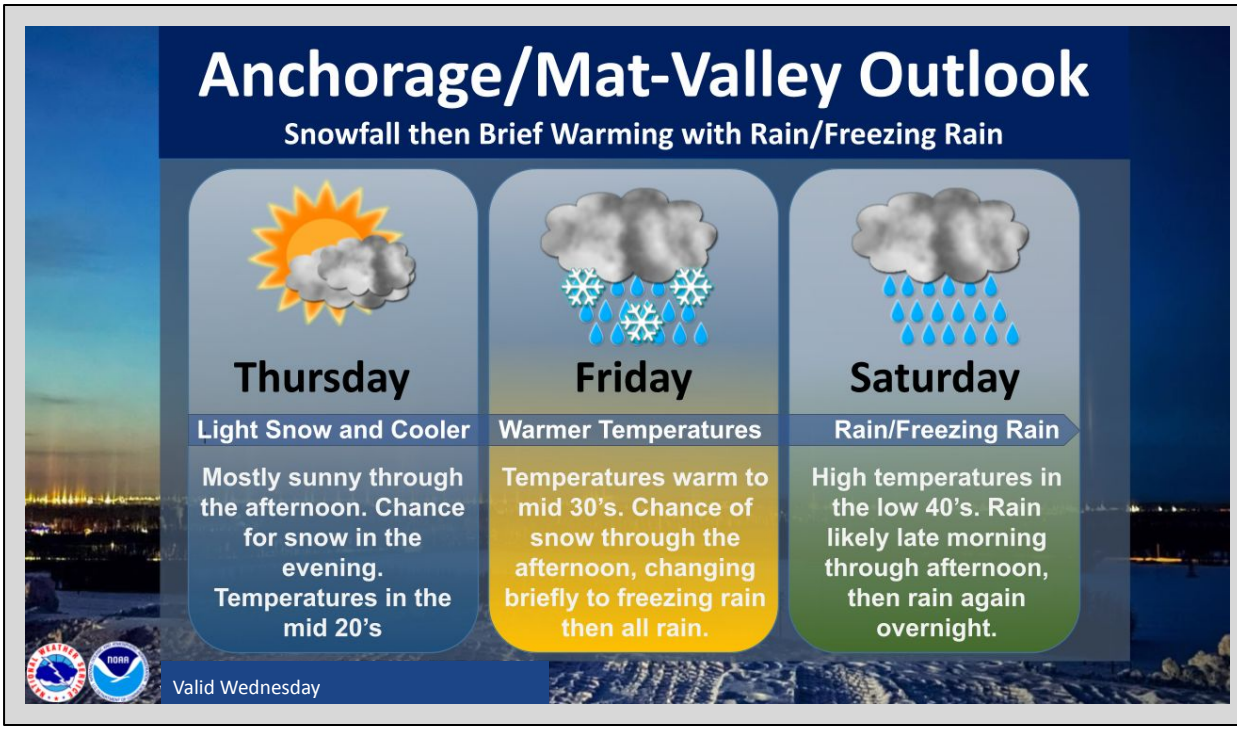
NOAA/NWS Anchorage,AK 907-266-5127

How are you feeling about your situation based on this message? Are you making any decisions at this time?
What other information are you looking for? Are you sharing this message or portions of it with stakeholders - if so, whom?
How important is the confidence level/information to your decision-making?

<u>Weather Summary:</u>
A series of disturbances are expected to impact Southcentral for the end of the week clear through the weekend. A large longwave trough will dig southward across the west coast of Alaska and eastern Bering by Thursday night through Friday. This will allow a downstream ridge to develop across Southcentral, causing southerly flow to develop across Southcentral through the weekend, as the area lies in between the trough to the west and the building ridge to the east. This will keep Southcentral right on the storm track, allowing for a series of disturbances to move through starting Thursday night and continuing through Tuesday. Each disturbance will bring warm air and precipitation along with it. The steady onshore flow and upslope will make for nearly continuous precipitation into the coastal mountains through early next week.



Are you familiar with this product? What is it telling you? How do you use it in decision-making? Is this a product you share, and with whom?



IS this outlook helpful? Would you be taking any actions at this point?

Southcentral Winter Storm
T-2
Thursday

National Weather Service Anchorage, AK @NWSAnchorage

NATIONAL WEATHER SERVICE
Anchorage, AK
weather.gov/Anchorage

The weather impact level for Friday and Saturday is: **Moderate**

Key Points:

- Snow Thursday transitioning to freezing rain Friday and Saturday.
- Confidence is moderate-high for periods of frozen precipitation in a form other than snow. A Special Weather Statement has been issued to convey this threat.
  - Warmer air moves in Friday morning resulting in the transition from snow to rain.
  - During this transition, there will likely be a period of freezing rain across much of Southcentral.
- Slick conditions Friday and Saturday
  - Falling rain on frozen surfaces can cause slick conditions, even where temperatures are a few degrees above freezing. Areas that get a period of freezing rain during the transition will see conditions further deteriorate.
  - Higher elevations will see a smoother transition from snow to rain.
- Gusty winds through Turnagain Arm, Knik Arm, and through the Copper River Basin
  - Gusty winds will decrease the chance for freezing rain, but falling rain on frozen surfaces will still create slick conditions.

Confidence:

High: Precipitation beginning Thursday as snow and transitioning over to rain, from south to north. Temperatures will warm above freezing across much of Southcentral by Saturday.

Moderate: Periods of frozen precipitation in a form other than snow during the transition from snow to rain Friday into Saturday. Much of Southcentral may see periods of freezing rain and/or slick surfaces.

NOAA/NWS Anchorage,AK 907-266-5127

How do you interpret the “moderate” level in this message? What impacts are you preparing for/concerned about? What other information would you be looking for at this point?

Weather Summary:

Southerly flow sandwiched between a longwave trough digging into the southern Bering/Aleutian Islands and a developing ridge over Southcentral on Thursday results in a gradual increase in temperatures across much Southcentral. This allows for a transition from snow to rain from south to north Thursday night into Friday, with likely periods of freezing rain Friday through Friday night. Southcentral will remain right along the storm track, with a series of disturbances moving into the region from the Gulf. Coastal areas will see a steady onshore and upslope flow, causing continual precipitation into the coastal mountains through Saturday.

SPECIAL WEATHER STATEMENT

AKZ101-111-121-125-131-135-141-145-141300-

Anchorage-Matanuska Valley-Western Kenai Peninsula-Western Prince William Sound-Northeast Prince William Sound-Southeast Prince William Sound-Copper River Basin-Susitna Valley-

Including the cities of Anchorage, Eagle River, Indian, Eklutna, Palmer, Wasilla, Sutton, Chickaloon, Kenai, Soldotna, Homer, Cooper Landing, Whittier, Seward, Girdwood, Moose Pass, Valdez, Thompson Pass, Cordova, Glennallen, Eureka, McCarthy, Paxson, Slana, Talkeetna, Willow, and Cantwell

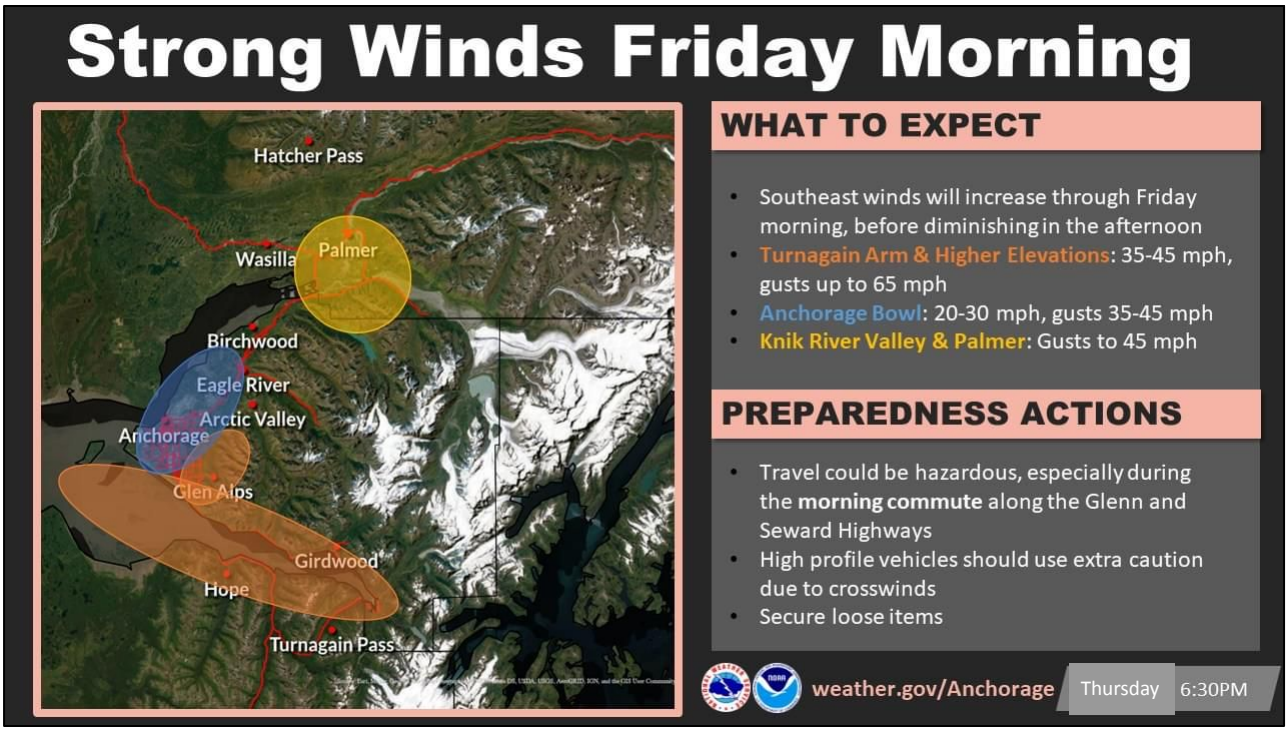
1000 AM AKST Thursday

...AREAS OF SNOW MAY MIX WITH FREEZING RAIN FRIDAY INTO SATURDAY ACROSS SOUTHCENTRAL...

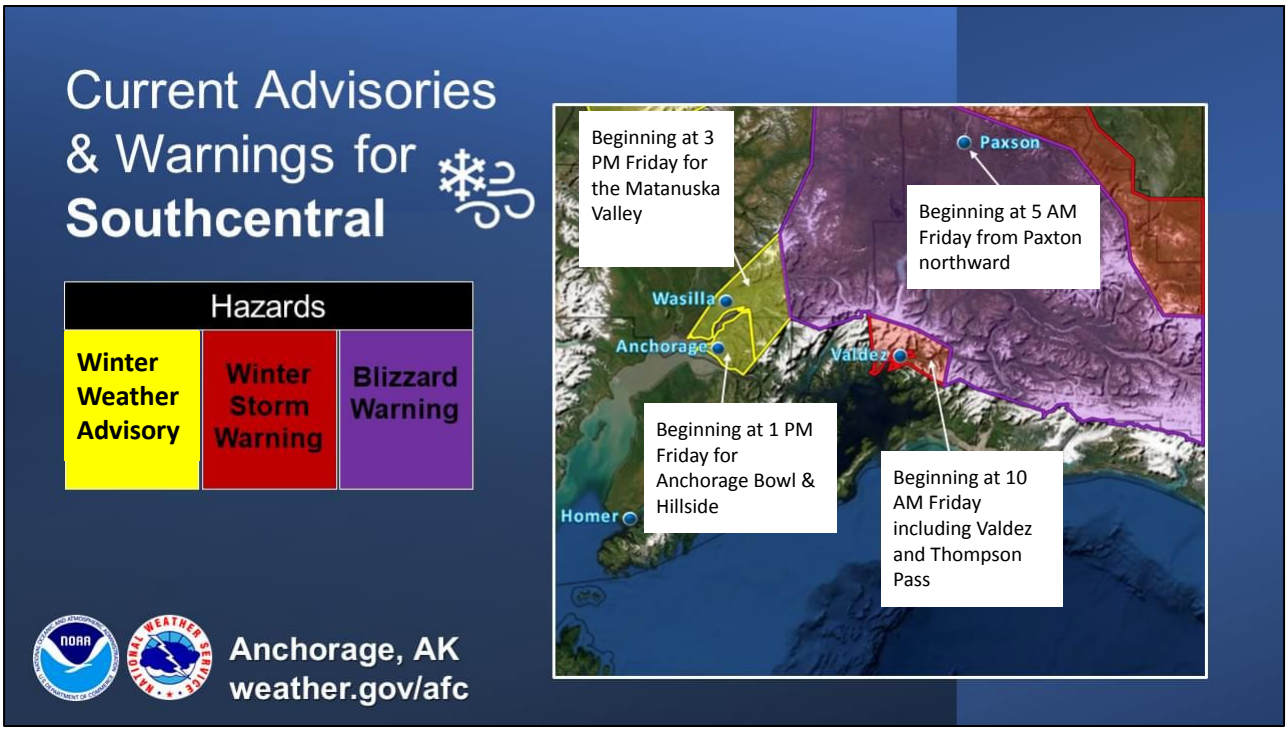
The active weather pattern will continue as the work week progresses. This next system is expected to be the strong with heavy precipitation amounts possible. The warming trend ushering in with this system may result in mixed precipitation especially along the Kenai Peninsula and coast of Prince William Sound. Precipitation will first fall as snow for all areas with snow accumulations likely Thursday. By Friday, warm air will begin to overspread the southern portions of the Kenai Peninsula before continuing to spread northeastward towards the Anchorage Bowl/Mat-Su Valleys/Prince William Sound/Copper River Basin Friday afternoon and Saturday. The warm air may lead to snow mixing with rain, or perhaps even simply changing to rain during this period. Ahead of the warming trend Friday afternoon across the Anchorage and Mat-Su regions, expect strong winds. Therefore, slow down and use caution when traveling Friday and Saturday.

Motorists are urged to use caution and slow down when travelling this area. For the latest road conditions call 5 1 1 or visit 511.alaska.gov.

What is this telling you? WOuld you use this statement in your decision-making?
What decisions are you making right now?



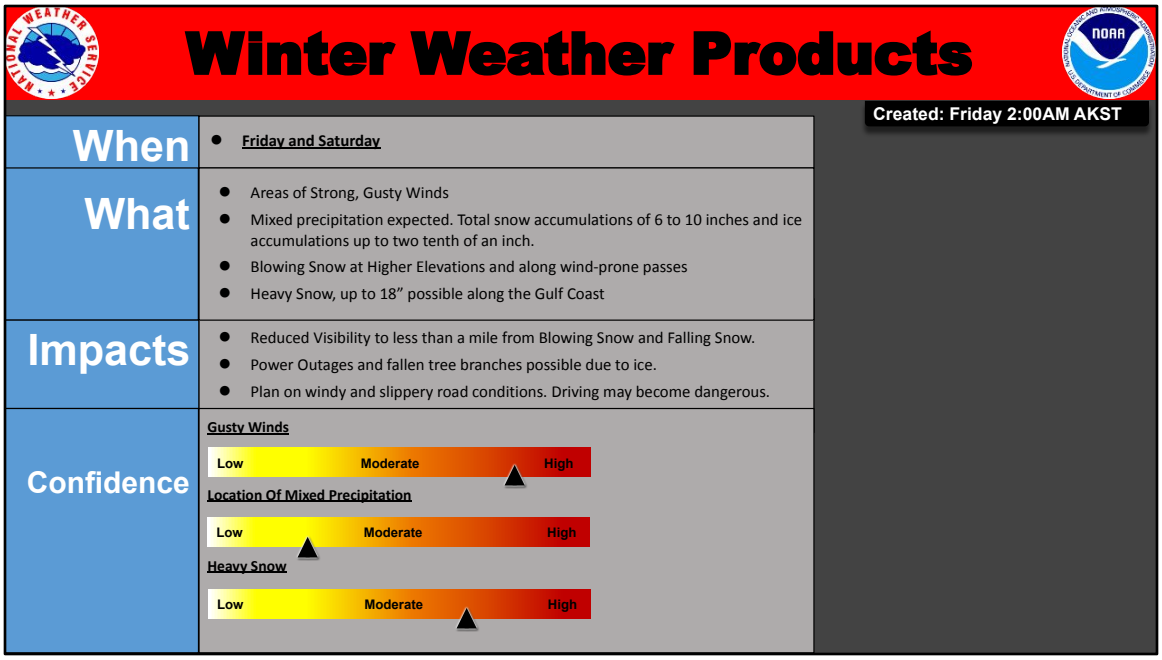
This product is talking about winds. How important is wind information in your decision-making? What other information are you looking for right now?



How do these advisories change your understanding of your risk? Do you use winter weather advisories in your decision-making? What about winter storm and blizzard warnings? What actions would an advisory trigger? What actions would a warning trigger?

Southcentral Winter Storm
T-1
Friday

National Weather Service Anchorage, AK @NWSAnchorage

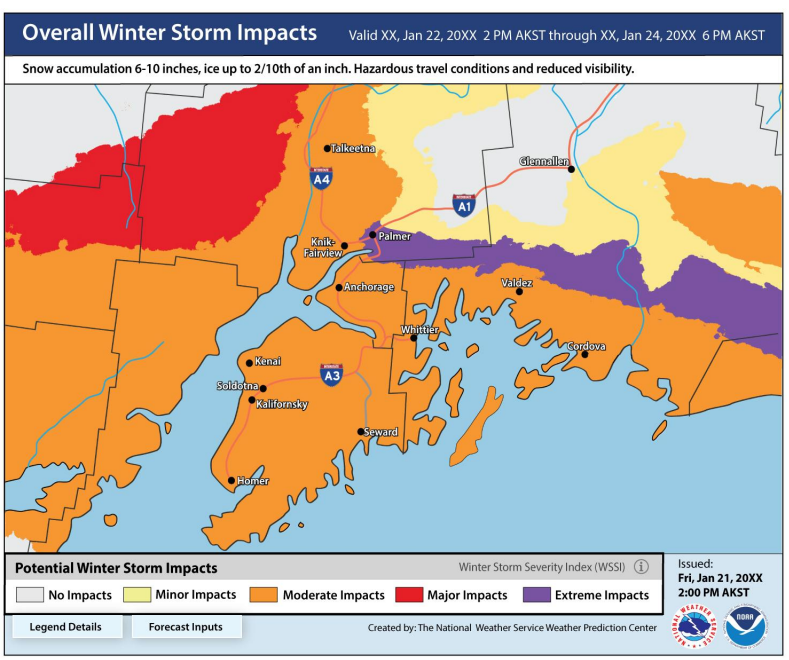


How helpful is this graphic? Look at the impacts: are these the impacts you are concerned about? What else might you be concerned about? How helpful is confidence information as presented?
This is one way of presenting impacts - let's look another.

A wind chill advisory is in effect for the Kuskokwim Delta and for Bristol Bay, north of King Salmon through Saturday afternoon. Expect 15 to 25 mph sustained winds. The strongest winds will occur Friday night, with gusts to 30 mph. Very cold wind chills are expected across the Kuskokwim Delta and Bristol Bay through the weekend.

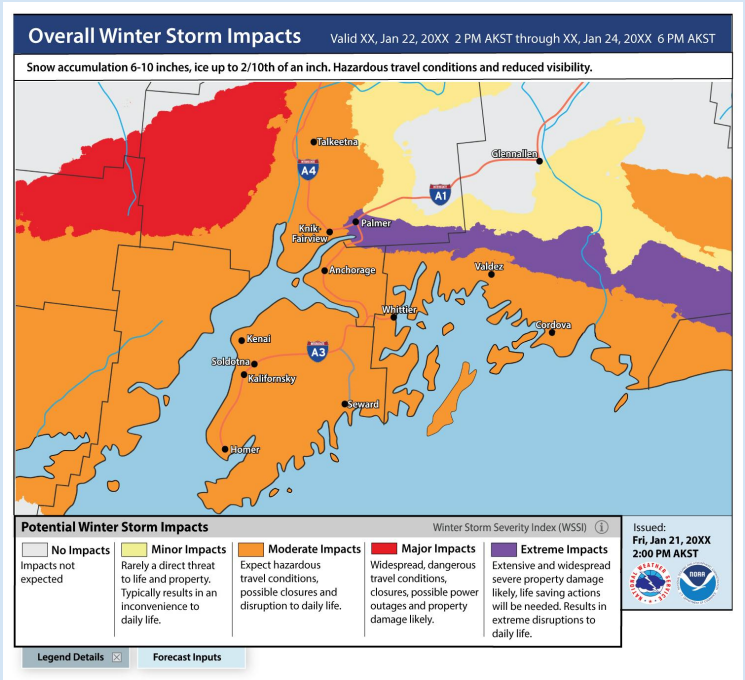
A wind chill advisory means that cold air and wind will combine to create dangerously low wind chills. Frostbite and hypothermia can occur if precautions are not taken. Use caution while traveling outside. Wear appropriate clothing, a hat, and gloves.

For the latest forecast, please visit www.weather.gov/afc

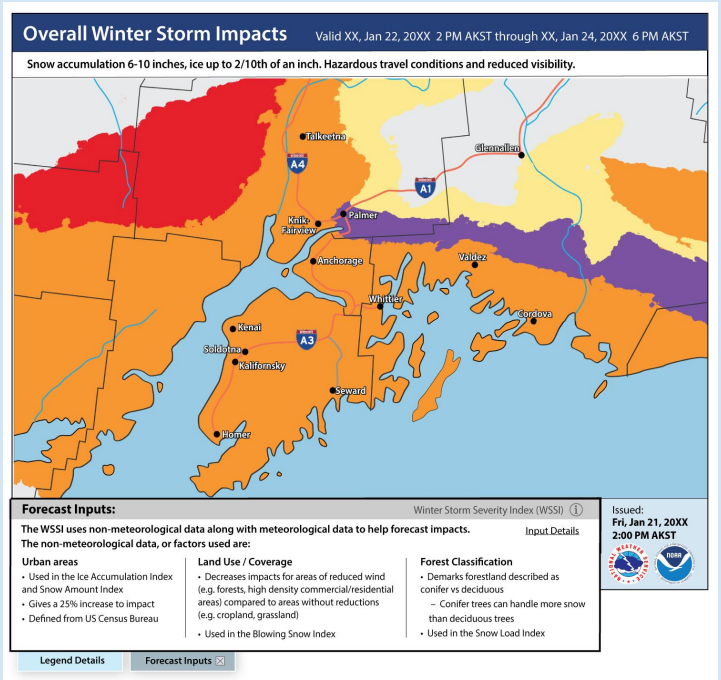


What is this product telling you? How do you interpret the impact levels? What else do you want to know based on this graphic?

How do you like this compared to the previous way of presenting impacts? Is this more helpful?



This version shows a more complete legend description. How do these impact definitions meet your decision-making needs? Is this product possibly useful to you? How? What else would it need to be useful? Would you share this product with others, and if so, with whom?



Let's study this legend a little more closely. This legend tells you some of the background factors that are used to determine the impact levels (that is, what is considered extreme or major or moderate and why). Is this information helpful to you? What else would you be looking for when using this product? Which impacts are you most concerned about when looking at this product?

Mention forecaster's note and ask if it is helpful. What type of information would be helpful presented this way?

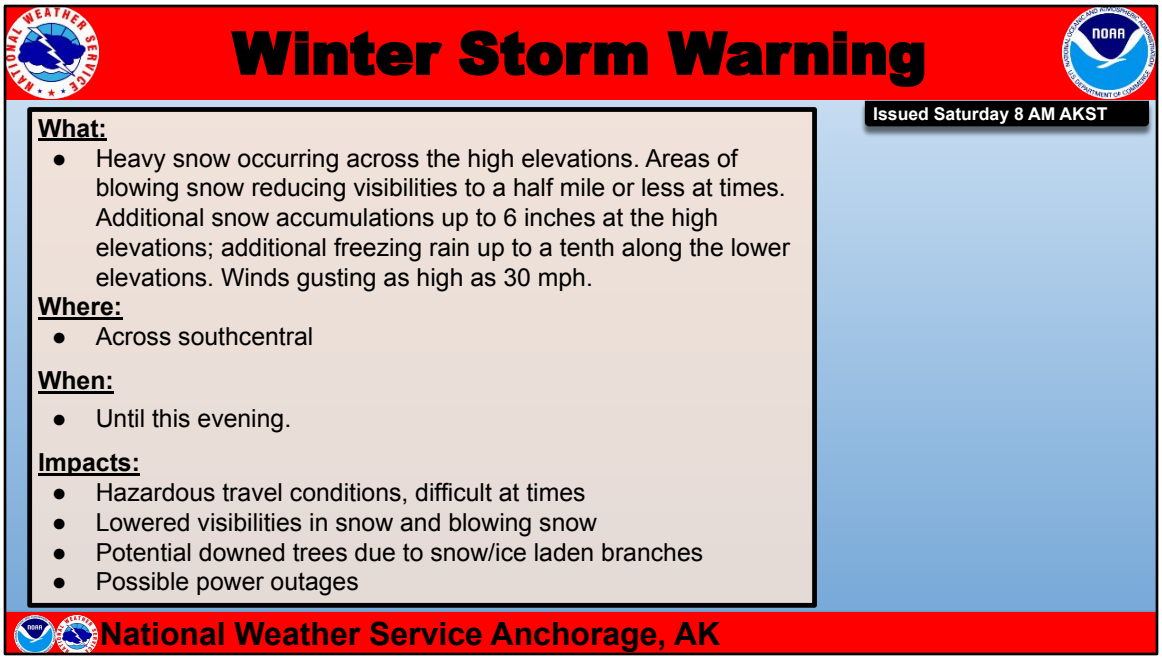
Details

- Snow, heavy for many southcentral locations.
- Snow amounts may be less than predicted across the lower elevations as snow mixes with freezing rain.
- Windy conditions will create areas of lowered visibilities, including blizzard conditions near and north of Paxton.

National Weather Service Anchorage, AK **@NWSAnchorage**

How do you assess your risk based upon this graphic? How concerning is this information? What actions are you taking? What else are you looking for?

Southcentral Winter Storm
Update
T
Saturday
National Weather Service Anchorage, AK
@NWSAnchorage

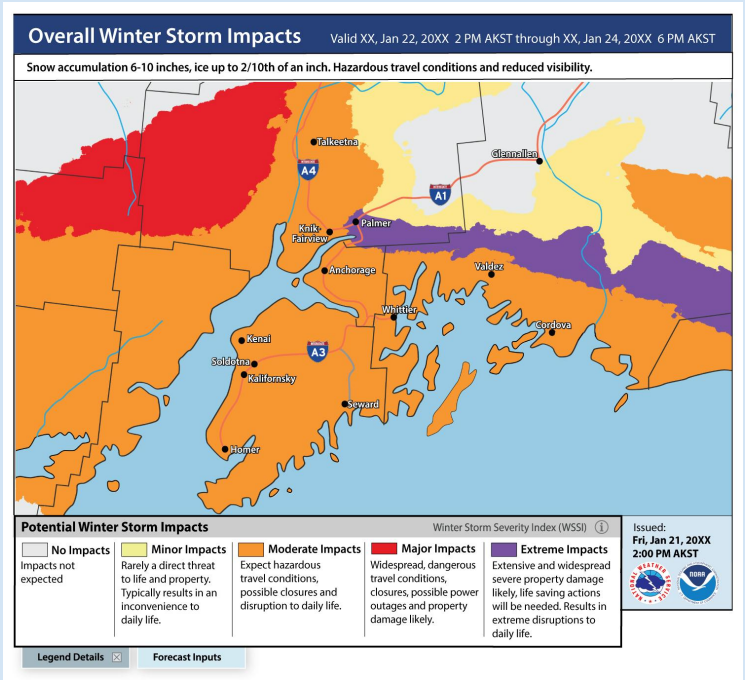


What actions are you taking? Are there other impacts you are concerned about that have not been listed in this warning or previous products?
How much of concern is freezing rain to you and what impacts do you typically have to deal with?

Winter Weather Advisory is upgraded to a Warning as the freezing rain makes its impacts; the Blizzard Warning in downgraded to a Winter Storm Warning as winds begin to subside. Precipitation is expected to taper off tonight with the warning expiring as expected.

WSSI Website

Have you visited this site before?
Explain the features/give tour of the site. Note that this is for CONUS only but that there will be one for Alaska in the future.
What features of the website are most useful to you?
Is there anything that is missing? What additional functionality would be helpful?
Is there anything that is confusing?
How would you use the information/products on this site? When would you use it (i.e. how many days before storm)?
Ask about rolling window - is this useful? Would you use this and if so, how?
Do you prefer static images to the interactive website?



Anything else you would add? Look at forecasters' note and legend again.
Leading components/impacts that need to be included in a useful product.