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**ALASKA-PACIFIC RIVER FORECAST CENTER OPERATIONS**

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**SUMMARY OF REVISIONS:** This supplement supersedes NWS Alaska Region Supplement (ARS) 06-2003, dated November 18, 2005, applicable to National Weather Service Instruction (NWSI) 10-911. It adds the role of the Service Coordination Hydrologist. It addresses the changes that have been made to the role of the Alaska-Pacific River Forecast Center in the coordination and issuance of hydrologic warning products.

\_\_\_\_\_/SIGNED/  
Frank P. Kelly  
Regional Director

April 30, 2010  
Date

## Alaska-Pacific River Forecast Center Operations

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1. Introduction. This supplement identifies unique conditions in Alaska Region that affect operations and services of the Alaska-Pacific River Forecast Center (APRFC).

2. Staff Operational Responsibilities and Specialty Areas.

2.1 Hydrologist in Charge. The Hydrologist in Charge (HIC) of the APRFC also serves as the Regional Hydrologist for Alaska Region. As such, the HIC participates in meetings and discussions with the Hydrologic Service Divisions of the other regions and NWS Headquarters, representing Alaska Region and ensuring the interests of the Pacific Region are addressed.

2.2 Development and Operations Hydrologist. The Development and Operations Hydrologist (DOH) will serve in a deputy capacity for the Regional Hydrologist as necessary for hydrologic activities within the Region.

2.3 Service Coordination Hydrologist. The Service Coordination Hydrologist (SCH) will serve in a deputy capacity for the Regional Hydrologist as necessary for hydrologic activities within the Region.

3. Hours of Operation.

3.1 Routine Hours of Operation. Hours of operation for the APRFC will at all times be based upon regional policy on core hours and on hydrologic conditions within the state. During open water season, extending from the onset of ice breakup on area rivers in the spring to the time in which ice conditions on area rivers prevent accurate stage and discharge measurements in the winter, the APRFC will conduct routine operations from 6:00 a.m. to 5:00 p.m. daily. This

allows APRFC forecasters to coordinate with forecasters on multiple shifts at the weather forecast offices (WFO). During the winter season, personnel will work 8- to 10-hour days that allow the APRFC to be staffed during core hours (9 a.m. to 2 p.m.) on non-holiday weekdays.

3.2 Extended Hours of Operations. When conditions warrant in any season, the APRFC hours of operation may be extended. Prior to the end of the standard APRFC work day, the lead forecasters at any of the WFOs or the regularly scheduled duty forecasters in the APRFC for that day may ask the HIC, DOH, SCH or designated supervisor to extend the duty day. This may require extended work hours for the duty forecasters or it may be accomplished by modifying the shift schedules of the other qualified forecasters. When the APRFC is not staffed, the lead forecaster at any WFO may contact the scheduled duty forecasters for that day, HIC, DOH, or SCH to request information or support. Contact procedures for the APRFC will be part of the WFO and APRFC local station policy. Any Alaska weather service office (WSO) seeing a need for extended hours at the APRFC should coordinate requests for this support through their partner WFO.

#### 4. Routine Operations.

4.4 Flash Flood Guidance Operations. The APRFC does not have sufficient well-calibrated model basins to prepare and distribute daily model-based flash flood guidance throughout its area of responsibility. In those areas for which daily values are not available, the APRFC provides static values based on hydrologic regimes and precipitation recurrence intervals. In some areas, flash flood guidance schemes are prepared based on statistical hydrology and provided to the affected WFO. The principal cause of flash flood events in Alaska is convective rainfall in mountainous terrain, so the APRFC will provide active assistance to the Alaska WFOs in identification of rainfall events which might be expected to cause rapid flooding during hours of operations. Duty forecasters will be available to the WFO for consultation on hydrologic events when the APRFC is not staffed.

APRFC will provide hydrologic development support to the flash flood programs of all NWS offices in the Pacific Region as needed. This may include training, outreach, development of plans and procedures, and provision of flash flood forecasting tools once sufficient observational data are available. As part of the Advanced Hydrologic Prediction Services, the APRFC will develop prototype hydrologic modeling efforts for selected streams in Pacific Region using site specific models or distributed modeling.

4.5 WFO Support Operations. The APRFC works with the Alaska WFOs as a partner in the hydrologic program. APRFC will assist with the issuance of flood watches, warnings, and statements, including those for events which are primarily based on hydrologic causes, such as ice breakup on rivers, snow melt, glacier melt, and releases from glacier-dammed lakes through the generation of a hydrologic coordination message (HCM). All such forecasts will be coordinated with the WFO with hydrologic responsibility for the forecast area. APRFC issues selected routine forecast products which would normally be issued by the WFO based on APRFC guidance, such as hydrologic summaries (RVA) and daily river and lake summaries (RVD). A WFO product issued by the APRFC will use the standard product format and World Meteorological Organization header for that WFO, but may indicate within the product that it

was issued by the APRFC. APRFC may collect and distribute hydrometeorological observations from the WFOs' areas of responsibility, most notably those which are transmitted by the Meteorburst system or those which are entered by observers using the internet. APRFC will also provide support and assistance in the hydrologic outreach program of the WFOs and WSOs.

5. Non-Routine Operations.

5.3 Partnership with Alaska's Division of Homeland Security and Emergency Management.

The APRFC may provide hydrologic expertise in flooding, including the placement of a trained forecaster in Alaska's Division of Homeland Security and Emergency Management's aerial reconnaissance associated with spring breakup of ice on major rivers, when requested. This reconnaissance serves the purpose of outreach to communities at risk of flooding and delivers critical observational information not otherwise available to the forecasters at the APRFC. The APRFC will also provide hydrologic analysis, forecast, and warning support to meet public safety needs from events such as glacier-dammed lake outbursts or changes to river flow patterns associated with glacial movements.