Test Case RiverPro

for

Contract DG133W-05-CQ-1067

Advanced Weather Interactive Processing System (AWIPS) Operations & Maintenance

AWP.TE.SWCTR/TO10-0013

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Change History

Revision	Date	Affected Pages	Explanation of Change
Draft	21 Nov. 2008	ALL	Initial Draft
1	16 Jan. 2009	ALL	Result of NWS comments and PDT
2	6 Feb. 2009	12, 16	Result of DT

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1.0 SCOPE

See TO10 Software Test Plan.

2.0 APPLICABLE DOCUMENTS

2.1 Source Documents

- None

2.2 Reference Documents

- Legacy NWS Test Cases: Baseline_Riverpro (OB8.3); Baseline_Riverpro_OB8.1; Baseline_WANMHS_OB8.1; Baseline_RiverproNWRWAVES_OB8.1; Checkout_Riverpro-OB8.1.
- Software Test Plan for the Advanced Weather Interactive Processing System Project, Contract #DG133W-05-CQ-1067, January 2009.
- The Silver Spring NWS AWIPS 1 test bed application.
- Rational RequisitePro.

3.0 TEST CASE DESCRIPTION

This test case tests and verifies the functionality found within the current version of the WHFS RiverPro Product Formatter application known as RiverPro.

3.1 Assumptions, Constraints, and Preconditions

- TO10 software has been installed successfully.
- CAVE and EDEX are running.
- Data has been ingested.
- Actions, Results, and Requirements highlighted in gray indicate requirements and/or capabilities to be included in the scope of future task orders. They are included here for purposes of continuity and traceability with the original AWIPS I test case documents.

3.2 Recommended Hardware

See TO10 Software Test Plan.

3.3 Test Inputs

Section 4.0 contains the test procedures for this test case. Sections 2.2 – 2.9 of the TO10 Software Test Plan contain general test inputs applicable to all TO10 test cases. Grayed out test step(s) indicate functionality not yet delivered.

3.4 Test Outputs

The results outlined in section 4.0 are met.

4.0 TEST SCENARIO

Step #	Action	Result	Pass/Fail
Note: The Text Editor is often mentioned in this test case. The Text Editor has been implemented, but it does not open because there is no file available to open the Text Editor.			
1.	In CAVE, Mouse Button (MB) 1 click on the Perspectives icon and select 'Hydro' from the dropdown menu if available. If not available, select 'Other…'. Then select 'Hydro' from the Open Perspective dialog.	The Hydro Perspective displays in CAVE.	
2.	Under the 'HydroApps' menu, select the 'Launch RiverPro…' option.	The main RiverPro River Product Formatter window opens in OPERATIONAL Mode, listing 'Products to Generate' panel with recommended type of product (NWR and Description) and 'Forecast Groups/Points for RVS,FLS,FLW' panel with the points included in the recommended type of product.	
3.	From the 'Product to Generate' selection panel, select one non-recommended product. For example, if the recommended product is 'Flood Statement Default' (FLS), then select 'River Statement Default' (RVS).	The non-recommended product is highlighted.	
4.	MB1 click the 'Recomm for Current Product' button in the RiverPro main window.	The forecast points included in the highlighted product are selected in the 'Forecast Groups/Points to Include' selection panel. If none are highlighted, select a few points.	
5.	From the 'settings' menu in the RiverPro main window, select 'Recompute recommendations'	Compute internally the recommendations by using current information. It is possible that no display changes in the 'Product to Generate' and 'Forecast Groups/Point to Include' panels.	
6.	From the 'Settings…' menu in the RiverPro main window, select 'Reset to recommended'.	The recommended product is highlighted (FLS as described above) in the 'Product to Generate' panel. The forecast points included in the recommended product are highlighted in the 'Forecast Groups/Points for RVS,FLS,FLW' panel.	
7.	From the 'Settings…' menu in the RiverPro main window, select 'Select HSA…'	The Office Selection window opens. It displays the offices' id, number of forecast points and number of product definitions in that office.	

Step #	Action	Result	Pass/Fail
8.	Select the other office and MB1 click the 'OK' 'Close' button in the Office Selection window. (NOTE: there might be only one office to select)	The Office Selection window closes. The main RiverPro window updates its listing 'Products to Generate' panel with recommended type of product (Statement/Warning) and 'Forecast Groups/Points for RVS,FLS,FLW' panel with the points included in the recommended type of product for the new office.	DR #1915
9.	From the 'Settings…' menu in the RiverPro main window, select 'Select HSA…' again.	The Office Selection window opens.	
10.	Select the original office in the Office Selection window, MB1 click the 'OK' 'Close' button.	The Office Selection window closes. The main RiverPro window updates its listing 'Products to Generate' panel with recommended type of product (Statement/Warning) and 'Forecast Groups/Points for RVS,FLS,FLW' panel with the points included in the recommended type of product for the original office.	DR #1915
11.	From the 'ForecastPoint' menu in the RiverPro main window, select 'Show Recommendations…'. Should include information on VTEC if used a VTEC product.	The Recommendation/ Previous Product Information window opens. It displays the recommended product information, previous and current VTEC information and issued products information.	
12.	Select 'Close'.	The Recommendation/ Previous Product Information window closes.	
13.	From the 'Product to Generate' panel in the River Pro main window, select 'River Statement Default Product' (RVS).	The RVS product is highlighted.	
14.	From the 'ForecastGroups/Points for RVS, FLS, FLW' panel in the RiverPro main window, select some forecast points.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
15.	From the 'Forecast Point' menu in the RiverPro main window, select 'Show River Data…'.	The Forecast Point Stage/Discharge Information window opens. It displays the observed and forecast data, flood threshold information for each forecast point.	

Step #	Action	Result	Pass/Fail
16.	From the Forecast Point Stage/Discharge information window, select 'View Table'.	The Time Series Control window open.	
17.	Select 'Table'.	The Tabular Time Series window opens	
18.	Select 'Close' on the Time Series Control window and Tabular Time Series window	Both windows close.	
19.	From the Forecast Point Stage/Discharge Information window, select 'View graph'.	The Time Series Control window open.	
20.	Select 'Graph'.	Time Series Display window opens.	
21.	Select 'Close' on the Time Series Control window and 'Quit' from the 'File' menu in the Time Series Display window.	Both windows close.	
22.	Select 'Close' from the Forecast Point Stage/Discharge Information window.	The window closes.	
23.	From the 'ForecastPoint' menu in the RiverPro main window, select 'Show Reference Information…'.	The Reference Information window opens. It displays the forecast points' information such as associated county, zone, state, river, group, HSA and its primary backup and secondary backup service offices.	
24.	From the Reference Information window, select 'Close'.	The window closes.	
25.	From the 'Logs' menu in the RiverPro main window, select 'Current Session Errors/Info…'.	The text editor opens with a name such as 'rpf_message.log.xxx'. It displays the application's log message with the latest information is at the bottom of this text file.	Noted
26.	Select 'Quit' from the 'File' menu in the text editor.	The text editor closes.	Noted
27.	From the 'Product to Generate' panel, select 'FLS (Flood Statement Default)'	The Flood Statement Default is highlighted.	
28.	Select some groups/points from the 'Forecast Groups/Points for RVS,FLS,FLW' panel.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
29.	From the 'Settings' menu in the RiverPro main window, select 'Modify Product Sections'.	The Product Generation Settings window opens.	
30.	In the Product Generation Settings dialog, MB1 click 'Data Roundup…'.	The Data Roundup Section Settings dialog opens.	
31.	MB1 click the 'View' button.	The RiverPro Template window opens.	
32.	MB1 click the 'Close' button in the RiverPro Template window.	The RiverPro Template window closes.	
33.	MB1 click the 'Close' button in the Data Roundup Section Settings dialog.	The Data Roundup Section Settings dialog closes.	
34.	In the Product Generation Settings dialog, MB1 click 'Summary of Groups…'.	The Summary Section Settings dialog opens.	

Step #	Action	Result	Pass/Fail
35.	MB1 click the 'View' button.	The RiverPro Template window opens.	
36.	MB1 click the 'Close button in the RiverPro Template window.	The RiverPro Template window closes.	
37.	MB1 click the close button in the Summary Section Settings dialog.	The Summary Section Settings dialog closes.	
38.	In the Product Generation Settings dialog, MB1 click 'Hydromet Basis'.	The Hydromet Basis Section Settings dialog opens.	
39.	MB1 click the 'View' button.	The RiverPro Template window opens.	
40.	MB1 click the 'Close' button in the RiverPro Template window.	The RiverPro Template window closes.	
41.	MB1 click the close button in the Hydromet Basis Section Settings dialog.	The Hydromet Basis Section Settings dialog closes.	
42.	In the Product Generation Settings dialog, MB1 click 'Tabular'.	The Tabular Section Settings dialog opens.	
43.	MB1 click the 'View' button.	The RiverPro Template window opens.	
44.	MB1 click the 'Close button in the RiverPro Template window.	The RiverPro Template window closes.	
45.	MB1 click the close button in the Tabular Section Settings dialog.	The Tabular Section Settings dialog closes.	
46.	From the 'General Settings' section, select the 'Official' and 'Non-segmented' buttons.	The buttons are selected.	
47.	Select 'Apply', then 'Close' in the Product Generation Settings window.	The settings are saved and the Product Generation Settings window closes.	
48.	From the 'Product' menu, select 'Create…' to create a statement.	A text editor window opens with the filename 'work_product.xxx' which contains FLS product.	Noted
49.	Type some test comments to the end of the product. Select 'Save As' from the 'File' menu in the text editor.	The file is saved.	
50.	Select 'Quit' from the 'File' menu of the text editor window.	The text editor widow closes.	Noted
51.	From the 'Issue' menu in the main RiverPro window, select 'Issue Product…'.	The Product Issuance window opens asking the user if they would like to issue this generated product.	
52.	Select 'Send' in the 'Product Issuance' window.	The Product Issuance window closes and a second Product Issuance window opens with message stating 'Product issued and definitions reset to recommended'.	
53.	Select 'OK' in the second Product Issuance window.	The product is sent out.	

Step #	Action	Result	Pass/Fail
54.	From the 'Product' menu, select 'View/Corrected/Send Previous…'.	The View/Corrected/Send Previous Product window opens with the most recent product highlighted.	
55.	Select 'View Product' from the View/Corrected/Send Previous Product window and verify that the test comments from above are in the FLS product.	The Product Viewer window opens and shows the FLS product including the test comments.	
56.	Select 'OK' 'Close' in the Product Viewer window.	The Product Viewer window closes.	
57.	Select 'Close' in the View/Corrected/Send Previous Product window.	The View/Corrected/Send Previous Product window closes.	
58.	From the 'Logs' menu in the RiverPro main window, select 'Daily Product Issuances…'.	The text editor opens with name as 'rpf_issue.log.xxx'. It displays the daily product issuance log message for the just issued product.	Noted
59.	Select 'Quit' from 'File' menu in the text editor.	The text editor closes.	Noted
60.	From an lx1 terminal window, check the *handleOUP.log* file at /data/logs/fxa/display/localhost:0.x/<yyymmdd>, and the distributeProduct logs at /data/logs/fxa/display/<yyyymmdd>.Make sure the logs are updated with the product just sent from RiverPro.	Logs have been updated. *Note:* x is either 0, 1 or 2 depending on which display that Riverpro is running.	
61.	Open NWRWAVES GUI by MB1 clicking to open the start-up menu and under *Hydro Apps* select NWRBrowser. Make sure the product you just sent is under the pending column. Open it and verify its contents (date, time, data, text)	Product is under the Pending column and it is verified. Note: If you don't see the product there, most likely is because it is not included in the NWRWAVES triggers text file located under: /data/fxa/siteConfig/textApps *Steps 43 and 44* can be executed for verification after each product is sent.	
62.	From the 'Product to Generate' panel, select 'FLW (Flood Statement Warning)'.	The Flood Statement Warning is highlighted.	
63.	Select some groups/points from the 'Forecast Groups/Points for RVS,FLS,FLW' panel.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
64.	From the 'Settings' menu, select 'Modify product sections'.	The Product Generation Settings window opens.	
65.	In the 'General Settings' section of the Product Generation Settings window, for 'Product Text Case', select 'Mixed Case'.	The 'Mixed Case' button is selected.	
66.	In the 'Product Sections/Subsections to Include' section of the Product Generation Settings window, select 'Product Header'.	The Product Header Settings window opens.	

Step #	Action	Result	Pass/Fail
67.	In the Product Header Settings window, edit the 'Issuance Number', 'Expiration Date', and 'TimeZ' with valid values, and note the changes.	The 'Issuance Number', 'Expiration Date', and 'TimeZ' with valid values are modified and noted.	
68.	MB1 click the 'View' button.	The RiverPro Template window opens.	
69.	MB1 click the 'Close button in the RiverPro Template window.	The RiverPro Template window closes.	
70.	Select 'Apply' and 'Close' in the Product Header Settings window. Open template and make sure changes are applied.	The changes are applied and the Product Header Settings window closes.	
71.	In the 'General Settings' section of the Product Generation Settings window, select the 'Official' and 'Segmented' buttons. In the 'By:' options menu, select 'Forecast Point'.	The items are selected.	
72.	Select 'Apply', then 'Close' in the Product Generation Settings window.	These changes for settings are saved and the Product Generation Settings window closes.	
73.	From the 'Product' menu on the main RiverPro window, select 'Create…'.	The text editor window opens with the statement incorporating the chosen settings.	Noted
74.	Add test comments, select 'Save As' then quit.	The window closes.	Noted
75.	From 'Issue' menu in the RiverPro main window, select 'Issue Product…'.	The Product Issuance window opens asking the user if they would like to issue this generated product.	
76.	Select 'Send' in the Product Issuance window.	The Product Issuance window closes and a second Product Issuance window opens with message 'Product issued and definitions reset to recommended'.	
77.	Select 'OK' in the second Product Issuance window.	The product is sent out.	
78.	From the 'Products' menu in the RiverPro main window, select 'View/Corrected/Send Previous Product'.	The View/Corrected/Send Previous Product window opens and the most recent product is highlighted.	
79.	Select 'View Product' for the issued FLW product in the View/Corrected/Send Previous Product window.	The Product Viewer window opens, check the changes made in the Product Header section. Make sure variable changes display in the template.	
80.	Select 'OK' 'Close' in the Product Viewer window.	The Product Viewer window closes.	
81.	Select Close from 'View/Corrected/Send Previous Product'.	The window closes.	

Step #	Action	Result	Pass/Fail
82.	From the 'Product to Generate' panel, select 'FLW (Flood Statement Warning)'. Select some groups/points from the 'Forecast Groups/Points for RVS,FLS,FLW' panel. From the 'Settings' menu in the RiverPro main menu, select 'Modify Product Sections…'.	The Product Generation Settings window opens.	
83.	In the 'General Settings' section of the Product Generation Settings window, select the 'Segmented' button. In the 'Product Sections/Subsection to Include' panel in the Product Generation Settings window, include all product sections and all three forecast point subsections by selecting an order. Choose the sections in any order, and note the order from the pull down option menu next to the section. Do not duplicate the order.	The options are selected.	
84.	From 'Product Generation Settings', MB1 click each section/subsection button. Select a template in the opened window. For example, MB1 click the 'Headline' button, pick a template in the Headline Section Settings window, MB1 click the 'View' button to review the template content and make a note of it. Then select 'Apply' and 'OK' 'Close'.	The Product xxx Section Settings window opens. E.g. Product Headline Section Settings window. The RiverPro Template window opens. The selected template is available for review. After 'Apply' and 'OK' 'Close', the settings are saved and the Product xxx Section Settings window closes.	
85.	Select the 'Impact Statement' button from the 'Product Generation Settings' panel.	The Impact Statement Sub-Section Settings window opens, allowing the tester to customize the impact statement search parameters to select the impact statements.	

Step #	Action	Result	Pass/Fail
86.	Select each of the following options in turn, and note any changes made: a. Reference Stage/Flow: select one of the following: Current Observed, Max Forecast or Current Obs/Max Fcst b. Stage Window sliders (-5.0 - 5.0): change the slider c. Maximum Depth below Flood Stage slider (-10.0 – 0): change the slider d. Search Type: select one of the following: Closest in Stage/Flow Window, Highest in Stage/Flow Window or All Below Upper Stage/Flow The items b and c above can be replaced by specifying flow parameters instead of stage as the followings. b. Flow Window: enter the percentage values for the lower and upper limits c. Max Offset below Flood Flow: enter the percentage value for the maximum offset Note, the impact statement search parameters can be based on stage or flow.	The selections are able to be modified.	
87.	From the Impact Statement Sub-Section Settings window, select the 'Apply Parameters' button and then the 'Apply' button.	If there is impact statement found for the forecast point based on these parameters, the results are: a. The line of data (ImpactStg/Flow|Start|End|Tendency) is highlighted in the 'Settings for Selected Forecast Point' list window. b. The 'Impact(s) to Use' field is filled with the impact values. c. The impact statement related to the highlighted 'ImpactStg/Flow' is displayed in the bottom window list. d. The 'Text for Stage/Flow' text box displays the highlighted 'ImpactStg/Flow' value.	
88.	From the Impact Statement Sub-Section Settings window, select 'OK' 'Close'.	The Impact Statement Sub-Section Settings window closes.	
89.	From the Product Generation Settings window, select the 'Crest Comparison'.	The Comparison Subsection Sub-Section Settings window opens, allowing the tester to edit parameters to select historical comparisons.	

Step #	Action	Result	Pass/Fail
90.	Select each of the following options in turn, and note any changes made: a. Reference Stage/Flow: select one of Current Obs/Max Fcst, Current Observed and Max Forecast b. Stage Window sliders (-5.0 – 5.0): change the slider c. Maximum Depth below Flood Stage slider (-10.0 – 0.0): change the slider d.Year Lookback slider (0 - 100): change the slider e. Search Type options: select one of the five items The items b and c above can be replaced by specifying flow parameters instead of stage as the followings. b. Flow Window: enter the percentage values for the lower and upper limits c. Max Depth below Flood Flow: enter the percentage value for the maximum offset Note, the crest comparison search parameters can be based on stage or flow	The selections are able to be modified.	
91.	From the 'Crest Comparison Sub-Section Settings', select the 'Apply Parameters' button and then the 'Apply' button.	If there is crest comparison found for the forecast point based on these parameters, the results are: a. The 'Crest to Use' field is filled with the crest stage/flow and the date the crest happened b. The line of data Crest Stg/Flow|CrestDate is highlighted	
92.	From the Crest Comparison Sub-Section Settings window, select 'OK' 'Close'.	The 'Crest Comparison Sub-Section Settings window closes.	
93.	Select 'Apply' and 'Close' in Product Generation Settings.	Selected.	
94.	From the 'Settings' menu in the RiverPro main menu, select 'Save to Settings File…' to save settings into file.	The Save Product Settings window opens, allowing the tester to save the selected definitions with a Description: e.g RVS - Test RVS, a FileName as rvs_new.pcc.<SITE>, where SITE is the site localization ID in capital letters.	
95.	Select 'OK' 'Close' in the Save Product Settings window.	The Saving Product Definition window closes opens and display message: 'Do you wish to overwrite …'.	

Step #	Action	Result	Pass/Fail
96.	From Saving Product Definition window, select 'OK'.	Overwrite the previous version of flw_new.pcc.<SITE> The Saving Product Definition window closes.	
97.	From the 'Product' menu in the main RiverPro menu, select 'Create…'.	The text window opens. The modified RVS product is created and displayed in the text editor window. Segments for individual forecast points have been created. The point-based segments are separated by '$$' character. The tabular section includes information for all included forecast points. The segment for each forecast point starts with the UGC code, followed by the MND date/time and includes the Roundup subsection, Impact Statement subsection and Crest Comparison subsection if the river stages/flows are within the ranges chosen from the Impact Statement and Crest Comparison windows. The Headline, Summary of Groups, Call to Action and Hydromet Basis sections do not appear in the segmented section of the product, they are ordered by the order number selected in the Product Generation Settings window.	Noted
98.	From 'File' menu in the text editor, select 'Quit'.	The text editor closes.	Noted
99.	From the 'Product to Generate' selection panel in the RiverPro main window, select 'River Statement Default (RVS)'.	The RVS product is highlighted.	
100.	Select some groups/points from the 'Forecast Groups/Points for RVS,FLS,FLW' selection panel in the main RiverPro window.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
101.	From the 'Settings' menu in the RiverPro main window, select 'Modify product sections…'.	The Product Generation Settings window opens.	
102.	In the 'General Settings' panel of the Product Generation Settings window, select the 'Official' and 'Segmented' buttons. In the 'By:' options menu, select 'County'.	The items are selected.	
103.	In the 'Product Sections/Subsections to Include' panel of the Product Generation Settings window, include all product sections and all three forecast point subsections by selecting an order. Choose the sections in any order, and note the order from the pull down option menu next to the section. Do not duplicate the order.	The selections are made.	

Step #	Action	Result	Pass/Fail
104.	From 'Product Generation Settings', MB1 click each sections/subsections buttons. Select a template in the opened window. For example, MB1 click the 'Headline' button, pick a template in the 'Headline Section Settings' window, MB1 click the 'View' button to review the template content and make a note of it. Then select 'Apply' and 'Close'.	The Product xxx Section Settings window opens. E.g. Product Headline Section Settings window. Open a text editor to review the selected template if the 'View' button is clicked. After 'Apply' and 'OK' 'Close', the settings are saved and the Product xxx Section Settings window closes.	
105.	Select 'Apply' and 'Close' in the Product Generation Settings window.	The settings are saved and the Product Generation Settings window closes.	
106.	From the 'Product' menu in the RiverPro main window, select 'Create…'.	The text editor window opens with the RVS product segmented by counties. The tabular section includes information for all included forecast points grouped by counties. The county-based segments are separated by '$$' character. The segment for each county starts with UGC code, follows by MND date/time and includes the 'Summary of Groups' section, roundup subsection, Impact Statement subsection and Crest Comparison subsection if the river stage/flow are within the ranges chosen from the Impact Statement and Crest Comparison windows. The Headline, Call to Action and Hydromet Basis sections do not appear in the segmented part of the product, they are ordered by the order number selected in the Product Generation Settings window.	Noted
107.	From the 'File' menu in the text editor, select 'Quit'.	The text editor closes.	Noted
108.	From the 'Product to Generate' selection panel in the RiverPro main window, select 'Flood Statement Default' (FLS).	The 'Flood Statement Default' option is highlighted.	
109.	Select some points from the 'Forecast Groups/Points for RVS/FLS/FLW' selection panel.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
110.	From the 'Settings' menu in the RiverPro main window, select 'Modify Product Sections'.	The Product Generation Settings window opens with five sections that are contained in the statement and allows the tester to select the order in which they are to appear.	

Step #	Action	Result	Pass/Fail
111.	Select all the product sections and all three forecast point subsections by selecting an order of appearance from the option menu next to each product section. Do not duplicate an order. Choose sections in any order, and note the order.	The selections are made.	
112.	From 'Product Sections/Subsections to Include' panel in the Product Generation Settings window, MB1 click each sections/subsections buttons. Select a template in the opened window. For example, MB1 click the 'Headline' button, pick a template in the 'Headline Section Settings' window, MB1 click the 'View' button to review the template content and make a note of it. Then select 'Apply' and 'Close'.	The Product xxx Section Settings window opens. E.g. Product Headline Section Settings window. Open a text editor to review the selected template if the 'View' button is clicked. After 'Apply' and 'Close', the settings are saved and the Product xxx Section Settings window closes.	
113.	Under 'General Settings' in the Product Generation Settings window, select the 'Official', 'Segmented' buttons and 'Forecast Group' from the 'By:' option menu.	The selections are made.	
114.	Select 'Apply' and 'Close' in the Product Generation Settings window.	The settings are saved and the Product Generation Settings window closes.	
115.	From the 'Product' menu in the RiverPro main window, select 'Create…' to create the product. Respond 'OK' if the Product Creation Warning window opens.	The text editor window opens with the Flood Statement Default (FLS) product segmented by groups of forecast points. Segments for groups of forecast points have been created. These segments are separated by '$$' characters. The segment for each group starts with UGC code, follows by MND date/time, and includes the 'Summary of Groups' section, roundup subsection, Impact Statement subsection and Crest Comparison subsection if the river stage/flow are within the ranges chosen from the Impact Statement and Crest Comparison windows. These sections do not appear in the exact order as previously chosen. Usually the Summary Body (in Summary section) appears on the top of the segmented section. The Headline, Tabular, Call to Action and Hydromet Basis sections do not appear in the segmented part of the product, they are ordered by the order number selected in the Product Generation Settings window.	Noted

Step #	Action	Result	Pass/Fail
116.	From the 'File' menu in the text editor, select 'Quit'.	The text editor closes.	Noted
117.	From the 'Product to Generate' selection panel in the RiverPro main window, select VTEC Flood Statement Default (FLS).	The 'VTEC Flood Statement Default' product is highlighted.	
118.	Select some points from the 'Forecast Groups/Points for RVS/FLS/FLW' selection panel.	If a forecast point is selected, only that point is highlighted. If a group is selected, all the forecast points in that group are highlighted.	
119.	From the 'Settings' menu in the RiverPro main window, select 'Modify Product Sections…'.	The Product Generation Settings window opens.	
120.	From 'Product Sections/Subsections to Include' panel in the 'Product Generation Settings' window, MB1 click each sections/subsections buttons. Select a template in the opened window. For example, MB1 click the 'Headline' button, pick a template in the 'Headline Section Settings' window, MB1 click the 'View' button to review the template content and make a note of it. Then select 'Apply' and 'Close'.	The Product xxx Section Settings window opens. E.g. Product Headline Section Settings window. Open a text editor to review the selected template if the 'View' button is clicked. After 'Apply' and 'Close', the settings are saved and the Product xxx Section Settings window closes.	
121.	From the 'General Settings' panel in the Product Generation Settings window, MB1 click the 'Official', 'Segmented' buttons, and 'Forecast Point' for the 'By:' option menu, MB1 click the 'Use VTEC' button, pick one of the key identifier (O/E/X/T).	The selections are made.	
122.	Select 'Apply' and 'Close' in the Product Generation Settings window.	The settings are saved and the Product Generation Settings window closes.	
123.	From the 'Settings' menu in the RiverPro main window, select 'Modify VTEC settings…'.	The Valid Time Event Coding (VTEC) Settings window opens. It displays the VTEC information for the proposed events and previous issued events. The forecast point shown on the top of the 'Proposed Events' and the 'Previous Events' list windows are highlighted.	
124.	From the Valid Time Event Coding (VTEC) Settings window, select the 'Check Selected' button.	The VTEC QC Check Report window opens to display the errors/warnings for the highlighted forecast point in the 'Proposed Events' list window.	
125.	Select 'Close' from the VTEC QC Check Report window.	The window closes.	
126.	From the Valid Time Event Coding(VTEC) Settings window, select the 'Check All' button.	The VTEC QC Check Report window opens to display the errors/warnings for all the forecast points included in the 'Proposed Event' list window.	

Step #	Action	Result	Pass/Fail
127.	Select 'Close' from the VTEC QC Check Report window.	The VTEC QC Check Report window closes.	
128.	From the 'Cause:' option menu in the Valid Time Event Coding (VTEC) Settings window, select another immediate cause.	The new immediate cause displays in the option menu.	
129.	Select the 'Update Cause for All' button in the Valid Time Event Coding(VTEC) Settings window.	The 'Cause' fields for all forecast points are updated to the new immediate cause in the 'Proposed Event' list window.	
130.	From the 'Action:' option menu in the Valid Time Event Coding (VTEC) Settings window, select another action code.	The new action code displays in the 'Action:' option menu.	
131.	Select the 'Update' button in the Valid Time Event Coding (VTEC) Settings window.	The 'Act.Ph.Sig.ETN' field is updated with the new action code for the highlighted forecast point in the 'Proposed Events' list window. (Note: if the product was already issued and this is a continuation or extension of and FL.Y, then it should not say '.NEW.' in the VTEC line and the ETN should be the one from the original issued product and not a new one).	
132.	Select 'Close' from the Valid Time Event Coding (VTEC) Settings window.	The Valid Time Event Coding(VTEC) Settings window closes.	
133.	From 'Product' menu in the RiverPro main window, select 'Create…'.	The text editor window opens with the VTEC Flood Statement Default (FLS) product segmented by forecast points.	Noted
134.	Respond 'Close' if 'VTEC QC Check Report' window opens.	These segments are separated by '$$' characters. The segment for each point starts with UGC code, follows by VTEC P-VTEC and H-VTEC lines (defined as /…/), and includes MND date/time, the Roundup subsection, Impact Statement subsection and Crest Comparison subsection if the river stage/flow are within the ranges chosen from the Impact Statement and Crest Comparison windows. The Headline, Tabular, Call to Action and Hydromet Basis sections do not appear in the segmented part of the product, they are ordered by the order number selected in the Product Generation Settings window.	
135.	From the 'File' menu in the text editor, select 'Quit'.	The text editor closes.	Noted

Step #	Action	Result	Pass/Fail
136.	From the 'Product to Generate' selection panel in the RiverPro main window, select 'NWR Flood Warning Default'. If testing on TBW4 (Alaska OCONUS), stop and go to Step 133.	The NWR Flood Warning Default is highlighted. NOTE: NWR products are not configured for testing on TBW4.	
137.	Select 'All' from the 'Forecast Groups/Points for RVS/FLS/FLW' selection panel in the RiverPro main window.	All forecast points in the 'Forecast Groups/Points for RVS, FLS, FLW' panel are highlighted.	
138.	From the 'Product' menu in the RiverPro main window, select 'Create…'.	The text window opens.	Noted
139.	Respond 'OK' if the Product Creation Warning window opens.	The product is displayed in the text editor window with the following information: Number of NWR towers considered for each tower, the call sign, city name, and WFO. Any locations that are to be included for that particular tower are listed, and the actual product for those locations is displayed.	
140.	In the text editor, add some test comments at the end of each tower product.		
141.	Select 'Save' from the 'File' menu in the text editor.		
142.	From the 'File' menu in the text editor, select 'Quit'.	The text editor closes.	Noted
143.	From the 'Issue menu' in the RiverPro main window, select 'Issue Product…'.	The Product Issuance dialog opens, confirming that the tester wants to issue the NWR Flood Warning Default product.	
144.	Select 'Send' in the 'Product Issuance' window.	Another Product Issuance dialog opens, confirming issuance of the NWR Flood Warning Default product(s).	
145.	Select 'OK' in the second Product Issuance window.	The Product Issuance dialog closes.	
146.	From the 'Product' menu in the RiverPro main window, select 'View/Corrected/Send Previous'.	The View/Corrected/Send Previous Product window opens, and the most recent product is highlighted.	
147.	Select 'All Products' from the 'List:' option menu. The products can be filtered by 'VTEC Products', 'Non-VTEC Products', 'NWR Products' or 'All Products'.	All issued products display as ProductId/TimeZ/Type.	
148.	Select 'View Product' for the just issued NWR Flood Warning Default product, and verify the edits in it.	The Product Viewer window opens.	
149.	Select 'OK' 'Close' in the 'Product Viewer'.	The Product Viewer window closes.	

Step #	Action	Result	Pass/Fail
150.	Select 'Close' in the View/Corrected/Send Previous Product window.	The View/Corrected/Send Previous Product window closes.	
151.	From the 'Product' menu in the RiverPro main window, select 'Exit' to close the RiverPro application.	RiverPro main window closes.	
152.	This concludes the test case	Done.	
End of Test			

5.0 REQUIREMENTS VERIFICATION TRACEABILITY MATRIX (RVTM)

Number	Description	Test Step(s)
SYSR3107	The AWIPS system shall implement RiverPro dialogs in the Hydroview perspective.	1-152
SYSR3108	The AWIPS system shall implement VTEC rules for RiverPro (Note that dissemination is planned under TO11 – communications capabilities).	123-135
SYSR3144	The AWIPS system shall implement the Create, edit and issue selected product capabilities for the RiverPro interactive application.	29-37, 48-67, 73-78
SYSR3145	The AWIPS system shall implement the select forecast group and points capability for the RiverPro interactive application.	13-24
SYSR3146	The AWIPS system shall implement the modify product generation settings capability for the RiverPro interactive application.	2-12, 71-72
SYSR3147	The AWIPS system shall implement the product sections and subsections capability for the RiverPro interactive application.	38-47, 82-122
SYSR3148	The AWIPS system shall implement the data usage (defaults, QPF, out of range) capability for the RiverPro interactive application.	136-150
SYSR3149	The AWIPS system shall implement the view data capability for the RiverPro interactive application.	68-70, 78-81