

A p p e n d i x C

RAS Coverage Data Structure

Main Channel Invert

The Main Channel Invert Coverage is used to define the location of the river channel and to establish the river and reach network. River and reach names are defined by the user and written to the STR_NAME and RCH_NAME items, respectively. Coverage items written to the arc attribute table (AAT) are listed below.

Item	Type	Output	Description
Cover#	B	5	Generated by ARC/INFO
Cover-ID	B	5	Generated by ARC/INFO
LENGTH	F	18	Generated by ARC/INFO, length of cut line
STR_NAME	C	16	Created by HEC-GeoRAS, user defined value for river
RCH_NAME	C	16	Created by HEC-GeoRAS, user defined value for reach

Dynamic segmentation information for the Main Channel Invert Coverage is written to the route table .RATHECSTR and section table .SECHECSTR.

.RATHECSTR

Item	Type	Output	Description
HECSTR#	B	5	Generated by ARC/INFO
HECSTR-ID	B	5	Generated by ARC/INFO
STREAMID	C	16	Generated by ARC/INFO

.SECHECSTR

Item	Type	Output	Description
ROUTELINK#	B	5	Generated by ARC/INFO
ARCLINK#	B	5	Generated by ARC/INFO
HECSTR#	B	5	Generated by ARC/INFO
HECSTR-ID	B	5	Generated by ARC/INFO
T-MEAS	F	12	Generated by ARC/INFO
F-MEAS	F	12	Generated by ARC/INFO
T-POS	F	12	Generated by ARC/INFO
F-POS	F	12	Generated by ARC/INFO

Cross Section Cut Line

The Cross Section Cut Line Coverage is used to determine the location and expanse of each cross section. All attribute data are attached to this coverage in the AAT before the RAS Import File is written.

Item	Type	Output	Description
Cover#	B	5	Generated by ARC/INFO
Cover-ID	B	5	Generated by ARC/INFO

Item	Type	Output	Description
LENGTH	F	18	Generated by ARC/INFO, length of cut line
STR_NAME	C	16	Created by HEC-GeoRAS, user defined value for river name
RCH_NAME	C	16	Created by HEC-GeoRAS, user defined value for reach name
STATION	F	12	Created by HEC-GeoRAS, defines the cross-section stationing
BANK1	F	7	Created by HEC-GeoRAS, defines percent distance to left bank station along cut line from left end
BANK2	F	7	Created by HEC-GeoRAS, defines percent distance to right bank station along cut line from left end
RL1	F	12	Created by HEC-GeoRAS, defines downstream reach length for left overbank
RL2	F	12	Created by HEC-GeoRAS, defines downstream reach length for main channel
RL3	F	12	Created by HEC-GeoRAS, defines downstream reach length for right overbank

Main Channel Banks

The Main Channel Banks Coverage is used to determine bank station locations for each cross section. The following attributes are written to the Main Channel Banks AAT.

Item	Type	Output	Description
Cover#	B	5	Generated by ARC/INFO
Cover-ID	B	5	Generated by ARC/INFO
LENGTH	F	18	Generated by ARC/INFO, length of arc

Flow Paths

The Flow Path Coverage is used to determine downstream reach lengths for each cross section. The following attributes are written to the Flow Paths AAT.

Item	Type	Output	Description
Cover#	B	5	Generated by ARC/INFO
Cover-ID	B	5	Generated by ARC/INFO
LENGTH	F	18	Generated by ARC/INFO, length of arc
STR_NAME	C	16	Copied from the Main Channel Invert Coverage (if it exists) in HEC-GeoRAS
RCH_NAME	C	16	Copied from the Main Channel Invert Coverage (if it exists) in HEC-GeoRAS