

# Australian Hydrological Geospatial Fabric (Geofabric) Data Dictionary

## Surface Catchments

Version 2.1 – November 2012



**Australian Government**  
**Bureau of Meteorology**



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## Geofabric Surface Catchments V2.1

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## Domains

<b>Domain Name</b>	<b>Domain Type</b>
<a href="#">AHGFCatchmentType</a>	Coded Value

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### AHGFCatchmentType

<b>Description</b>	Surface water drainage area (terrain based).
<b>Domain Type</b>	Coded Value
<b>Field Type</b>	Integer
<b>Merge Policy</b>	Default Value
<b>Split Policy</b>	Default Value

#### Domain Members

Name	Value
Catchment	21

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## ObjectClasses

ObjectClass Name	Type	Geometry	Subtype
<b>SH_Catchments</b>			<a href="#">Spatial References</a>
<a href="#">AHGFCatchment</a>	Simple FeatureClass	Polygon	-
<a href="#">NCBLevel1DrainageDivision</a>	Simple FeatureClass	Polygon	-
<a href="#">NCBLevel2DrainageBasinGroup</a>	Simple FeatureClass	Polygon	-
<b>Stand Alone ObjectClass(s)</b>			
<a href="#">NCBPfafstetter</a>	Table	-	-

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## AHGFCatchment

<b>Alias</b>	AHGFCatchment	Geometry:Polygon					
<b>Dataset Type</b>	FeatureClass	Average Number of Points:0					
<b>FeatureType</b>	Simple	Has M:No Has Z:No Grid Size:1,000					
Field Name	Alias Name	Model Name	Type	Precn.	Scale	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	0	0	4	No
Shape	Shape	Shape	Geometry	0	0	0	Yes
HydroID			Integer	0	0	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	0	0	4	No
NetNodeID	NetworkNodeID	NetNodeID	Integer	0	0	4	Yes
NCB_ID			Integer	0	0	4	No
SegmentNo			Integer	0	0	4	Yes
StreamName			String	0	0	60	Yes
HasSegment			Integer	0	0	4	Yes
ExtrnlBasn	ExternalBasin	ExtrnlBasn	Integer	0	0	4	Yes
NextDownID			Integer	0	0	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	0	0	25	No
SrcFType	SourceFeatureType	SrcFType	String	0	0	32	No
SrcType	SourceType	SrcType	Integer	0	0	4	Yes
SourceID			Integer	0	0	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	0	0	8	Yes
FSource	FeatureSource	FSource	String	0	0	25	No
AttrRel	AttributeReliability	AttrRel	Date	0	0	8	Yes
AttrSource	AttributeSource	AttrSource	String	0	0	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	0	0	2	Yes
Symbol			Small Integer	0	0	2	Yes
TextNote			String	0	0	50	Yes
AlbersArea			Double	0	0	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	0	0	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	0	0	8	Yes
Subtype Name	Default Value		Domain				
<b>ObjectClass</b>							
AHGFFType		21					<a href="#">AHGFCatchmentType</a>
Index Name	Ascending	Unique	Fields				
FDO_OBJECTID	Yes	Yes	OBJECTID				
FDO_Shape	No	No	Shape				
GDB_23_NCB_ID	Yes	No	NCB_ID				

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## NCBLevel1DrainageDivision

<b>Alias</b>	NCBLevel1DrainageDivision		Geometry:Polygon				
<b>Dataset Type</b>	FeatureClass		Average Number of Points:0				
<b>FeatureType</b>	Simple		Has M:No				
			Has Z:No				
			Grid Size:1,000				
Field Name	Alias Name	Model Name	Type	Precn.	Scale	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	0	0	4	No
Shape	Shape	Shape	Geometry	0	0	0	Yes
HydroID			Integer	0	0	4	No
DivNumber	DivisionNumber	DivNumber	Integer	0	0	4	Yes
Division			String	0	0	50	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	0	0	25	No
SrcFType	SourceFeatureType	SrcFType	String	0	0	32	No
SrcType	SourceType	SrcType	Integer	0	0	4	Yes
SourceID			Integer	0	0	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	0	0	8	Yes
FSource	FeatureSource	FSource	String	0	0	25	No
AttrRel	AttributeReliability	AttrRel	Date	0	0	8	Yes
AttrSource	AttributeSource	AttrSource	String	0	0	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	0	0	2	Yes
Symbol			Small Integer	0	0	2	Yes
TextNote			String	0	0	50	Yes
AlbersArea			Double	0	0	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	0	0	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	0	0	8	Yes
Subtype Name		Default Value		Domain			
Index Name	Ascending	Unique	Fields				
FDO_OBJECTID	Yes	Yes	OBJECTID				
FDO_Shape	No	No	Shape				
GDB_24_DivNumber	Yes	No	DivNumber				

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### NCBLevel2DrainageBasinGroup

<b>Alias</b>	NCBLevel2DrainageBasinGroup		Geometry:Polygon				
<b>Dataset Type</b>	FeatureClass		Average Number of Points:0				
<b>FeatureType</b>	Simple		Has M:No				
			Has Z:No				
			Grid Size:1,000				
Field Name	Alias Name	Model Name	Type	Precn.	Scale	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	0	0	4	No
Shape	Shape	Shape	Geometry	0	0	0	Yes
HydroID			Integer	0	0	4	No
DivNumber	DivisionNumber	DivNumber	Integer	0	0	4	Yes
Level2Num	Level2Number	Level2Num	Integer	0	0	4	Yes
Level2Name			String	0	0	50	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	0	0	25	No
SrcFType	SourceFeatureType	SrcFType	String	0	0	32	No
SrcType	SourceType	SrcType	Integer	0	0	4	Yes
SourceID			Integer	0	0	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	0	0	8	Yes
FSource	FeatureSource	FSource	String	0	0	25	No
AttrRel	AttributeReliability	AttrRel	Date	0	0	8	Yes
AttrSource	AttributeSource	AttrSource	String	0	0	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	0	0	2	Yes
Symbol			Small Integer	0	0	2	Yes
TextNote			String	0	0	50	Yes
AlbersArea			Double	0	0	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	0	0	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	0	0	8	Yes
Subtype Name	Default Value		Domain				
Index Name	Ascending	Unique	Fields				
FDO_OBJECTID	Yes	Yes	OBJECTID				
FDO_Shape	No	No	Shape				
GDB_25_Level2Num	Yes	No	Level2Num				

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**NCBPfafstetter**

<b>Alias</b>		NCBPfafstetter					
<b>Dataset Type</b>		Table					
<b>FeatureType</b>							
<b>Field Name</b>	<b>Alias Name</b>	<b>Model Name</b>	<b>Type</b>	<b>Precn.</b>	<b>Scale</b>	<b>Length</b>	<b>Null</b>
OBJECTID	OBJECTID	OBJECTID	OID	0	0	4	No
NCB_ID			Integer	0	0	4	No
Basin			Integer	0	0	4	Yes
BasinName			String	0	0	50	Yes
NCB_Code			String	0	0	20	Yes
PfafNo			Double	0	0	8	Yes
Level1			Integer	0	0	4	Yes
Division			String	0	0	50	Yes
Level2			Integer	0	0	4	Yes
Level2Name			String	0	0	50	Yes
PfafL3			Integer	0	0	4	Yes
PfafL4			Integer	0	0	4	Yes
PfafL5			Integer	0	0	4	Yes
PfafL6			Integer	0	0	4	Yes
PfafL7			Integer	0	0	4	Yes
PfafL8			Integer	0	0	4	Yes
PfafL9			Integer	0	0	4	Yes
PfafL10			Integer	0	0	4	Yes
PfafL11			Integer	0	0	4	Yes
PfafL12			Integer	0	0	4	Yes
PfafL13			Integer	0	0	4	Yes
PfafL14			Integer	0	0	4	Yes
PfafL15			Integer	0	0	4	Yes
BasinLevel			Integer	0	0	4	Yes
LastPfaf			Integer	0	0	4	Yes
BasinPfaf			String	0	0	17	Yes
BasinD8			Integer	0	0	4	Yes
AWRCBNum			String	0	0	5	Yes
AWRCRNum			String	0	0	5	Yes
AWRCDNum			String	0	0	5	Yes
AWRCBName			String	0	0	30	Yes
AWRCRName			String	0	0	35	Yes
AWRCDName			String	0	0	25	Yes
AnaBrLevel			Integer	0	0	4	Yes
MainStemUp			Integer	0	0	4	Yes
AnaBrDown			Integer	0	0	4	Yes
SegNoLink			Integer	0	0	4	Yes

<b>Subtype Name</b>	<b>Default Value</b>		<b>Domain</b>
<b>Index Name</b>	<b>Ascending</b>	<b>Unique</b>	<b>Fields</b>
FDO_OBJECTID	Yes	Yes	OBJECTID
GDB_8_Level1	Yes	No	Level1
GDB_8_Level2	Yes	No	Level2
GDB_8_NCB_ID	Yes	No	NCB_ID

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## Relationships

Name	Origin	Destination	Attributed	Composite	Rules
<a href="#">BasinGroupContainsPfafCats</a>	NCBLevel2DrainageBasinGroup	NCBPfafstetter	No	No	No
<a href="#">CatchmentIsExtendedByPfafstetter</a>	AHGFCatchment	NCBPfafstetter	No	No	No
<a href="#">DrainDivContainsPfafCats</a>	NCBLevel1DrainageDivision	NCBPfafstetter	No	No	No

### BasinGroupContainsPfafCats

<b>Composite</b>	No	
<b>Cardinality</b>	One To Many	
<b>Notification</b>	None	
<b>Attributed</b>	No	
	<b>Origin</b>	<b>Destination</b>
<b>ObjectClass</b>	NCBLevel2DrainageBasinGroup	NCBPfafstetter
<b>Key</b>	Level2Num ( <i>Origin Primary Key</i> )	Level2 ( <i>Origin Foreign Key</i> )
<b>Labels</b>	is contained by	contains

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### CatchmentIsExtendedByPfafstetter

<b>Composite</b>	No	
<b>Cardinality</b>	One To One	
<b>Notification</b>	None	
<b>Attributed</b>	No	
	<b>Origin</b>	<b>Destination</b>
<b>ObjectClass</b>	AHGFCatchment	NCBPfafstetter
<b>Key</b>	NCB_ID ( <i>Origin Primary Key</i> )	NCB_ID ( <i>Origin Foreign Key</i> )
<b>Labels</b>	extends	is extended by

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### DrainDivContainsPfafCats

<b>Composite</b>	No	
<b>Cardinality</b>	One To Many	
<b>Notification</b>	None	
<b>Attributed</b>	No	
	<b>Origin</b>	<b>Destination</b>
<b>ObjectClass</b>	NCBLevel1DrainageDivision	NCBPfafstetter
<b>Key</b>	DivNumber ( <i>Origin Primary Key</i> )	Level1 ( <i>Origin Foreign Key</i> )
<b>Labels</b>	is contained by	contains

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## Spatial References

Dimension	Minimum	Precision
<b>SH_Catchments</b>		
<b>X</b>	-400	
<b>Y</b>	-400	1,000,000,000
<b>M</b>	0	100,000
<b>Z</b>	0	100,000
<b>Coordinate System Description</b>		
GEOGCS["GCS_GDA_1994",		
DATUM["D_GDA_1994",		
SPHEROID["GRS_1980",6378137.0,298.257222101]],		
PRIMEM["Greenwich",0.0],		
UNIT["Degree",0.0174532925199433],		
AUTHORITY["EPSG",4283]]		

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