WRMIS User Manual

IRRIGATION NETWORK

Development of Water Resources Management Information System (WRMIS) and
Decision Support System (DSS) for Efficient Irrigation Water Management in Punjab

Version 1.0

NESPAK

23-Aug-16

Revision History

Version	Date	By	Summary of Changes
1.0	23-Aug-16	NESPAK	Initial Draft

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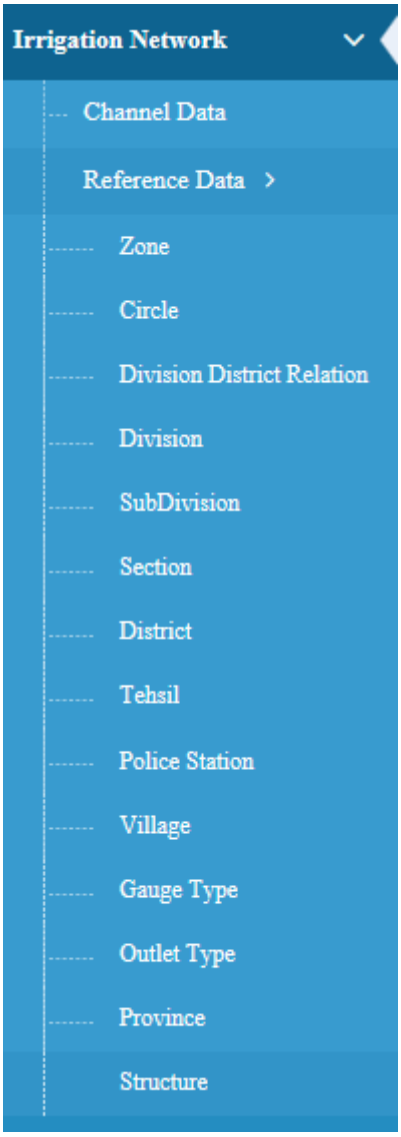
1. Irrigation Network- Reference Data

This module provides an interface to add, edit, maintain and delete the complete Irrigation Network which constitutes Barrages, head-works and channels. Channel include main canals, branch canals, distributaries, minor, sub-minor along with all the gauges such as head gauge, tail gauge, and critical gauges etc. In order to perform certain operations of Irrigation Department especially Channel Operations such as placing indents, discharge measurement, issuance of daily gauge slip, barrage/headwork data, cut/breach, water theft, outlet management etc., MIS System needs a complete data representation of Irrigation Network in a manageable, understandable and comprehensive way. For that purpose, a complete Irrigation Network is designed containing basic data for Channels, the Irrigation Boundaries, Administrative Boundaries of Channels & Outlets, the Gauges Information, the Discharge Tables for each gauge, and relationship of each channel with other canal such as Parent Channels, Off takes, and Feeders for each canal as well as the detail information about Head works/ Barrages

Business User: Administrator

Any other user can access “Irrigation Network” based on assigned rights from Roles and Rights (User Administration)

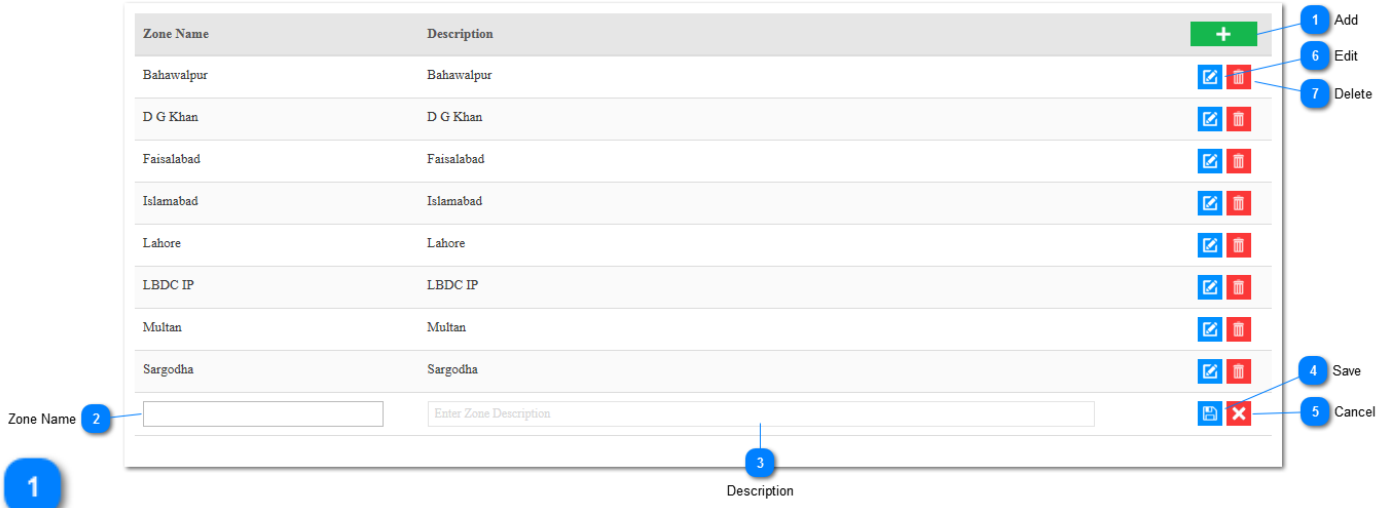
Pre-Requisite:
Irrigation Network Role and Rights should be assigned to respective user correctly.



1.1 Reference Data: Zone

Already created Zone are listed down in a tabular form and user can edit, view and delete already created Zone and can also add new Zones.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Zone



1 Add

- Click on <Add> button adds a new row into the table for adding a new record.

2 Zone Name

- User enter Zone Name into Zone Name test field.
- Zone Name is mandatory field for adding a new Zone.

3 Description

- Enter Description for zone name.

4 Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added zone into the Table

5 **Cancel**

- By clicking on the Cancel image, system moves the user to Zone page without saving the record.

6 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

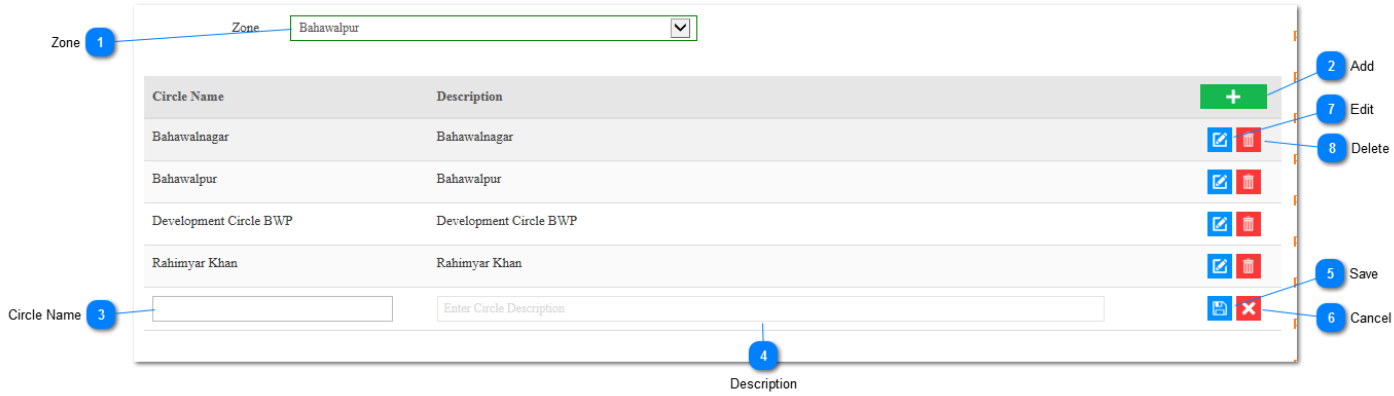
7 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table

1.2 Circle

User can add, edit, view and delete already created circle.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Circle



Adding a new circle

1

Zone

- User selects a zone from zone dropdown.
- All the circles associated with selected zone will be populated into tabular form.

2

Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

Circle Name

- User enters the circle name into Circle Name text field.
- Circle Name is mandatory field for adding a new Circle.

4

Description

- User enters the description about the added circle into Description text field.

5

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

6

Cancel

- By clicking on the Cancel image, system moves the user to Zone page without saving the record.

7

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

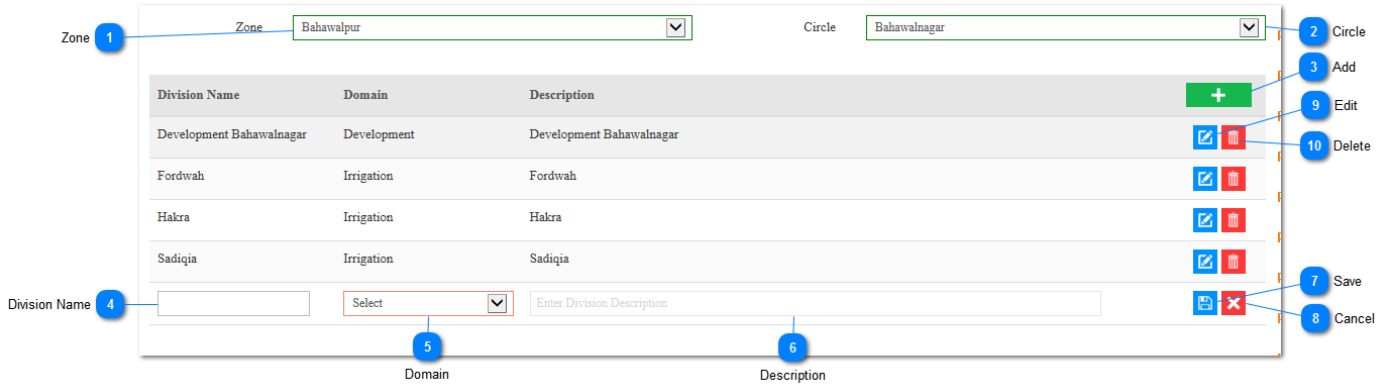
8

Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.3 Division

User can add, edit, view and delete Divisions against already created Circles. .How to Access: Main Menu -> Irrigation Network - > Reference Data->Division



Add a new Division

1 Zone

- User selects a zone from zone dropdown.
- All the circles associated with selected zone will be populated into Circle dropdown.

2 Circle

- User selects a circle into ‘Circle’ dropdown.
- All the Divisions associated with the above Circle will be populated into a table.

3 Add

- Click on <Add> button adds a new row into the table for adding a new record.

4 Division Name

- User enters the name of new Division into Division Name text field.
- Division Name is mandatory field for adding a new Division

5

Domain

- User selects the domain from the Domain dropdown.
- Selecting Domain is mandatory field for adding a new Division.

6

Description

- User enters description for the new division into Description Text field.

7

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

8

Cancel

- By clicking on the Cancel image, system moves the user to Division page without saving the record.

9

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

10

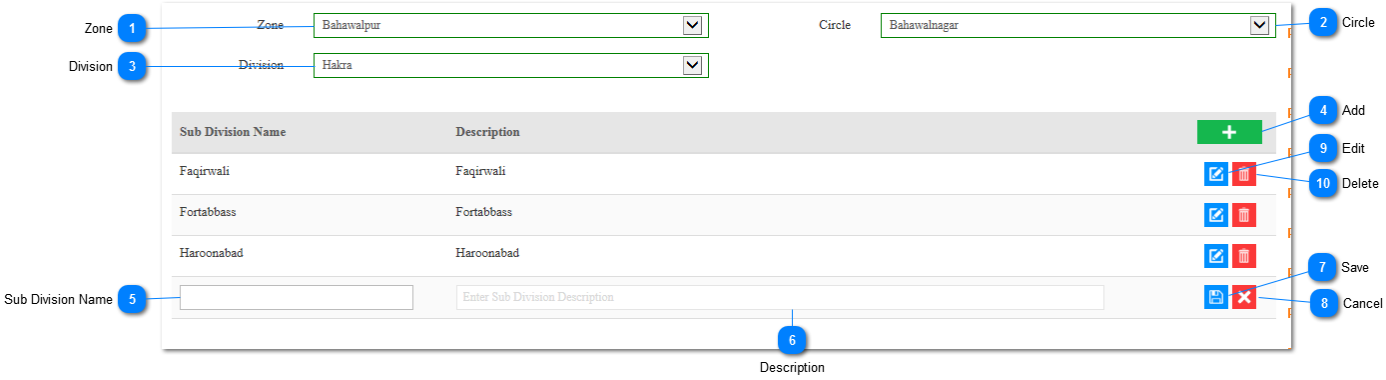
Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.4 Sub Division

User can add, edit, view and delete the Sub Divisions within a Division.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Sub Division



Adding a new Sub Division

1

Zone

- User selects a zone from zone dropdown.
- All the circles associated with selected zone will be populated into Circle dropdown.

2

Circle

- User selects a circle into ‘Circle’ dropdown.
- All the Divisions associated with the above Circle will be populated into Division dropdown.

3

Division

- User selects a division into ‘Division’ dropdown.
- All the Divisions associated with the above Circle will be populated into a Table.

4

Add

- Click on <Add> button adds a new row into the table for adding a new record.

5

Sub Division Name

- User enters the name of new sub division into ‘Sub Division’ text field.
- Sub Division Name is mandatory field for adding a new Sub Division.

6

Description

- User enters the description of the new sub division into ‘Description’ text field.

7

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

8

Cancel

- By clicking on the Cancel image, system moves the user to Sub Division page without saving the record.

9

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

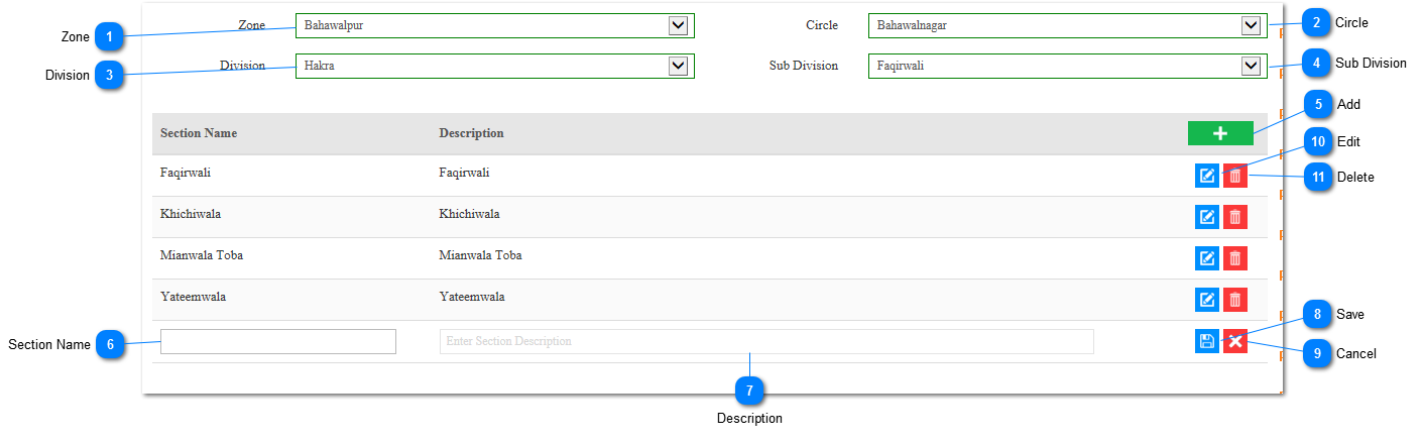
10 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.5 Section

User can add, edit, view and delete already created Section.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Section



Adding a new Section

1 Zone

- User selects a zone from zone dropdown.
- All the circles associated with selected zone will be populated into Circle dropdown.

2 Circle

- User selects a circle into ‘Circle’ dropdown.
- All the Divisions associated with the above Circle will be populated into Division dropdown.

3 Division

- User selects a division into ‘Division’ dropdown.
- All the sub divisions associated with the above Division will be populated into ‘Sub Division’ dropdown.

4

Sub Division

- User selects a division into ‘Sub Division’ dropdown.
- All the sections associated with the above sub division will be populated in a table.

5

Add

- Click on <Add> button adds a new row into the table for adding a new record.

6

Section Name

- User enters the name of new section into ‘Section Name’ text field.
- Section Name is mandatory field for adding a new Section.

7

Description

- User enters the description of the new section into ‘Description’ text field.

8

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

9

Cancel

- By clicking on the Cancel image, system moves the user to Section page without saving the record.

10

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

11

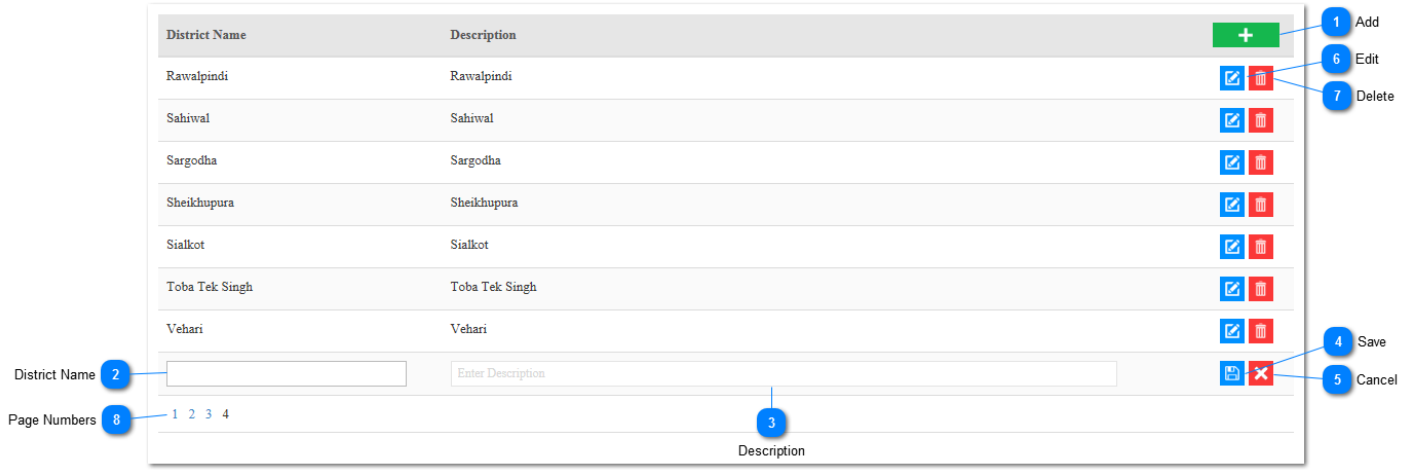
Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.6 District

User can add, edit, view and delete the District.

How to Access: Main Menu -> Irrigation Network - > Reference Data->District



Adding a new District

1

Add

- Click on <Add> button adds a new row into the table for adding a new record.

2

District Name

- User enters the name of new District into ‘District Name’ text field.
- District name is mandatory field for adding a new District.

3

Description

- User enters the description of the new district into ‘Description’ text field.

4

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

5

Cancel

- By clicking on the Cancel image, system moves the user to District page without saving the record.

6

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

7

Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

8

Page Numbers

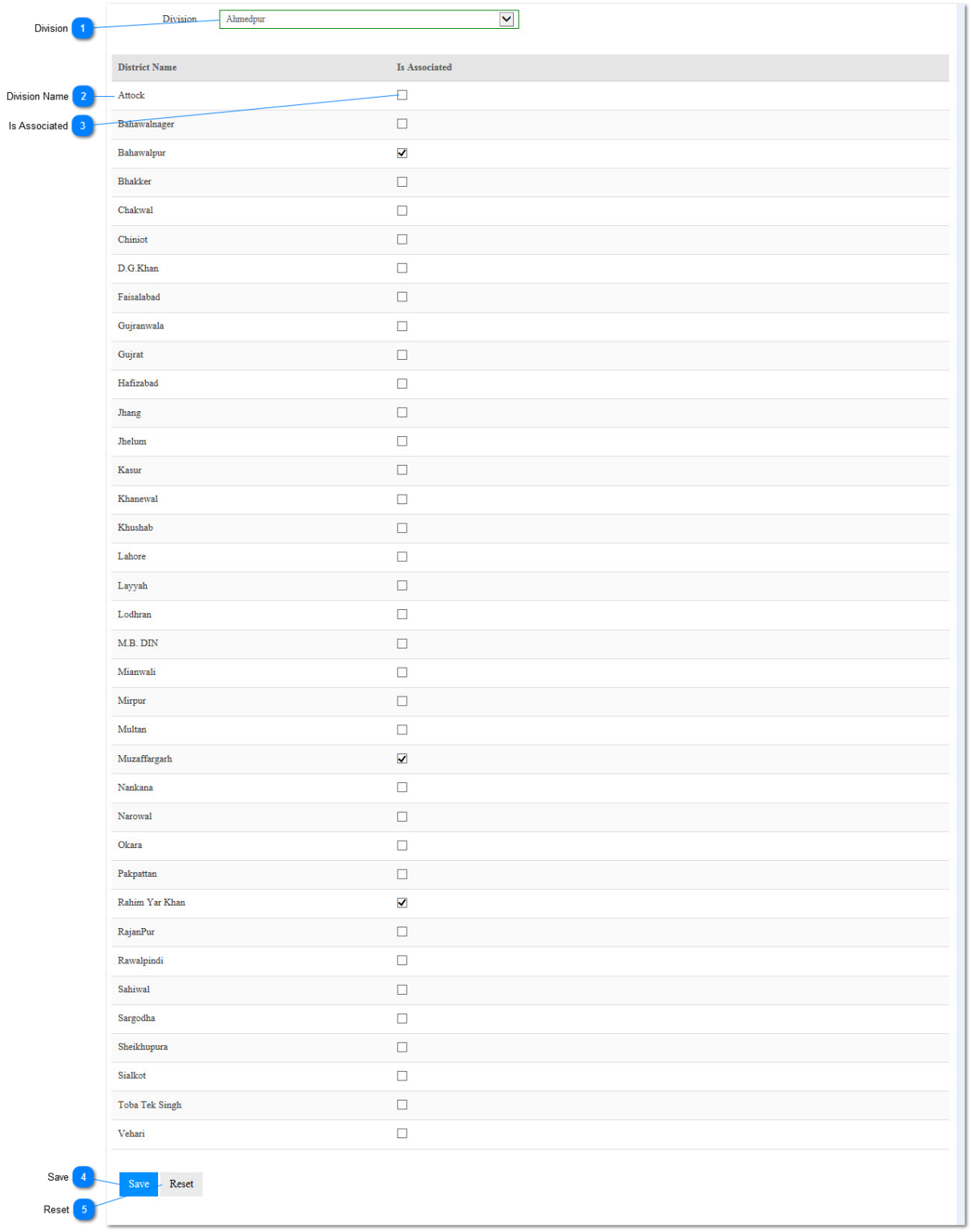
1 2 3 4

- Click on number to navigate to that specific page.
- System shows the record in alphabetical order

1.7 Division District Relation

User can associate/ un associate already created Districts with with already existed Divisions.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Division District Relationship



Assigning a District to a Division

1

Division

- System displays all the divisions into ‘Division’ dropdown.
- User selects a division into ‘Division’ dropdown.

2

District Name

- System shows the complete list of already created districts.

3

Is Associated

- User check/uncheck ‘Is Associated’ check box to assign/un assign district with selected Division into ‘Division’ dropdown.

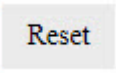
4

Save

- Click on <Save> button, system verify all the changes.
- System saves the data into the database & displays a message “Records saved successfully”.
- System displays newly assigned district as User selects the Division into ‘Division’ dropdown.

5

Reset

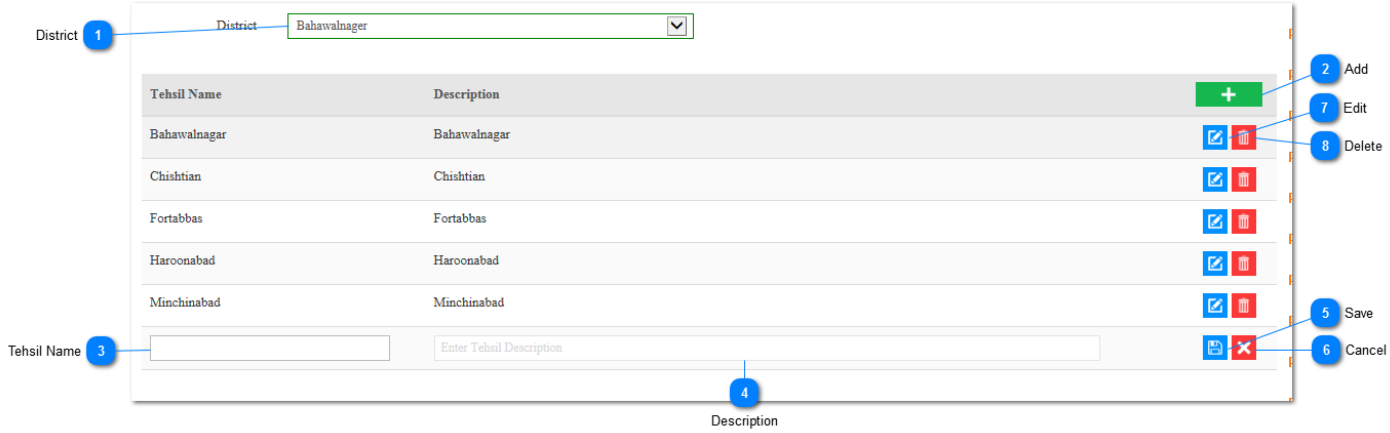


- Click on <Reset> button clears all the assigned districts against the specific Division.

1.8 Tehsil

User can, edit, view and delete already created Tehsil and can also add new Tehsils within already created Districts using this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Tehsil



Adding a new Tehsil

1

District

- User selects a District from 'District' dropdown.
- System displays already created tehsils into a table.

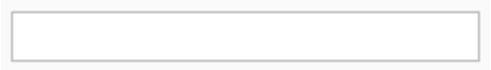
2

Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

Tehsil Name



- User enters tehsil name into 'Tehsil Name' text field.
- Tehsil Name is mandatory field for adding a new Tehsil.

4

Description

- User enters the description of new tehsil into ‘Description’ text field.

5

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table

6

Cancel

- By clicking on the Cancel image, system moves the user to Tehsil page without saving the record.

7

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

8

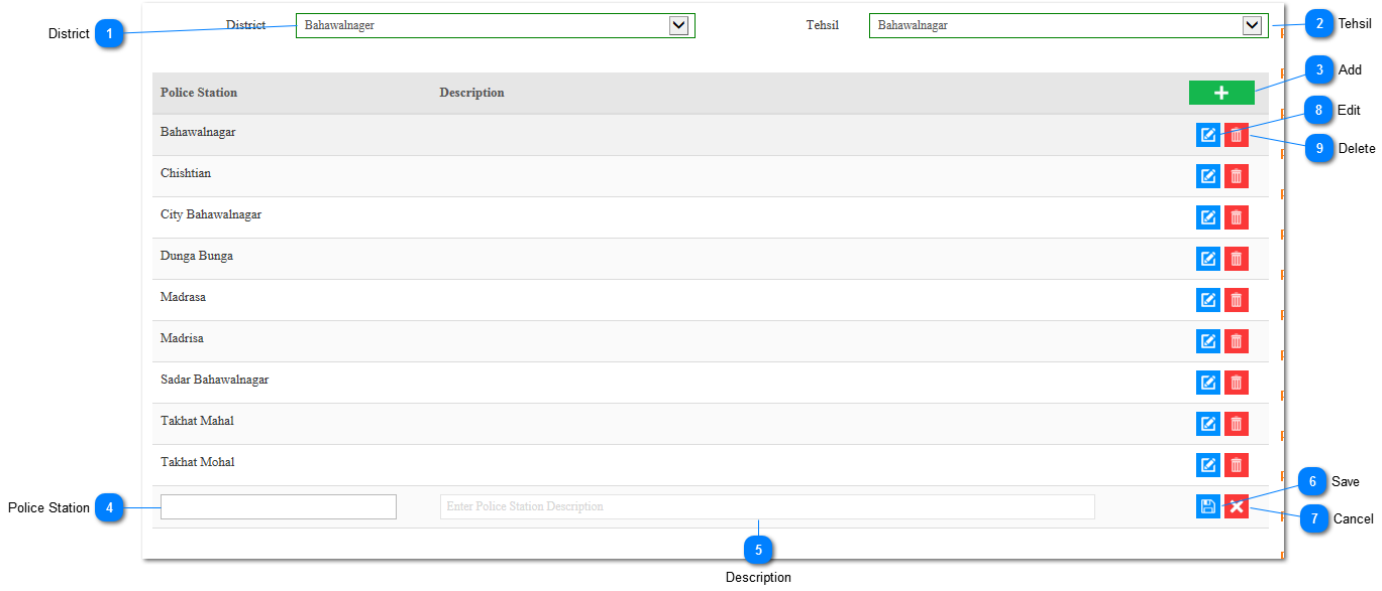
Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.9 Police Station

User can add, edit, view and delete the Police Station against already created Tehsils.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Police Station



Adding a new Police Station

1

District

- User selects a district into ‘District’ dropdown.
- System populates all the tehsils associated to selected district into ‘Tehsil’ dropdown.

2

Tehsil

- User selects a tehsil into ‘tehsil’ dropdown.
- All the police stations associated to the selected Tehsil populates in a table.

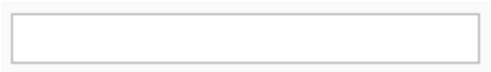
3

Add

- Click on <Add> button adds a new row into the table for adding a new record.

4

Police Station



- User enters the name of new Police Station into ‘Police Station’ text field.
- Police Station is mandatory field for adding a new Police Station.

5

Description

- User enters the description for new police station into ‘Description’ text field.

6

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

7

Cancel

- By clicking on the Cancel image, system moves the user to Police Station page without saving the record.

8

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

9

Delete

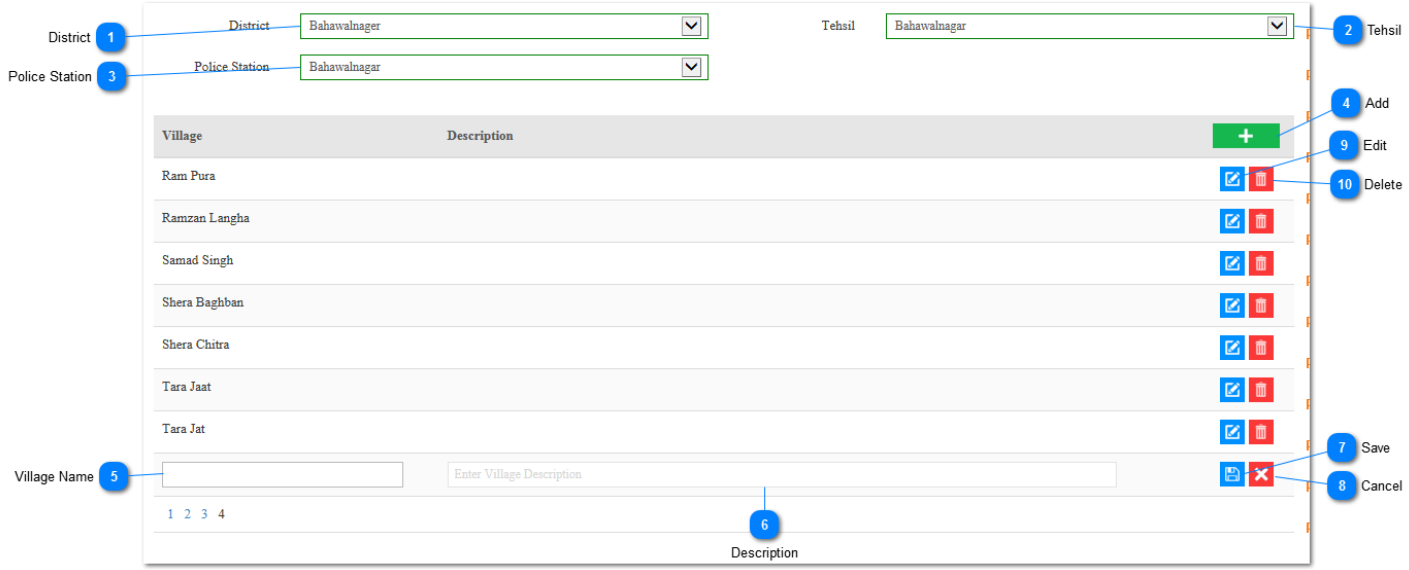
- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.

- System deletes the newly added record from the table.

1.10 Village

User can edit, view and delete already created Villages and can also add new Village through this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Village



Adding a new Village

1

District

- User selects a district into ‘District’ dropdown.
- System populates all the tehsils associated to selected district into ‘Tehsil’ dropdown.

2

Tehsil

- User selects a tehsil into ‘tehsil’ dropdown.
- All the police stations associated to the selected Tehsil populates into ‘Police station dropdown.

3

Police Station

- User selects a police station into ‘Police Station’ dropdown.
- All the villages associated to the selected Police Station populates in a table.

4

Add

- Click on <Add> button adds a new row into the table for adding a new record.

5

Village Name

- User enters the name of new village into ‘Village’ text field.
- Village Name is mandatory field for adding a new Village.

6

Description

User enters the description of the new village into ‘Description’ text field.

7

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required field(s) has not been entered.
- System displays newly added record into the Table.

8

Cancel

- By clicking on the Cancel image, system moves the user to Village page without saving the record.

9

Edit

- Click on ‘Edit’ image to edit the existing record.

- System opens the record into editable form.

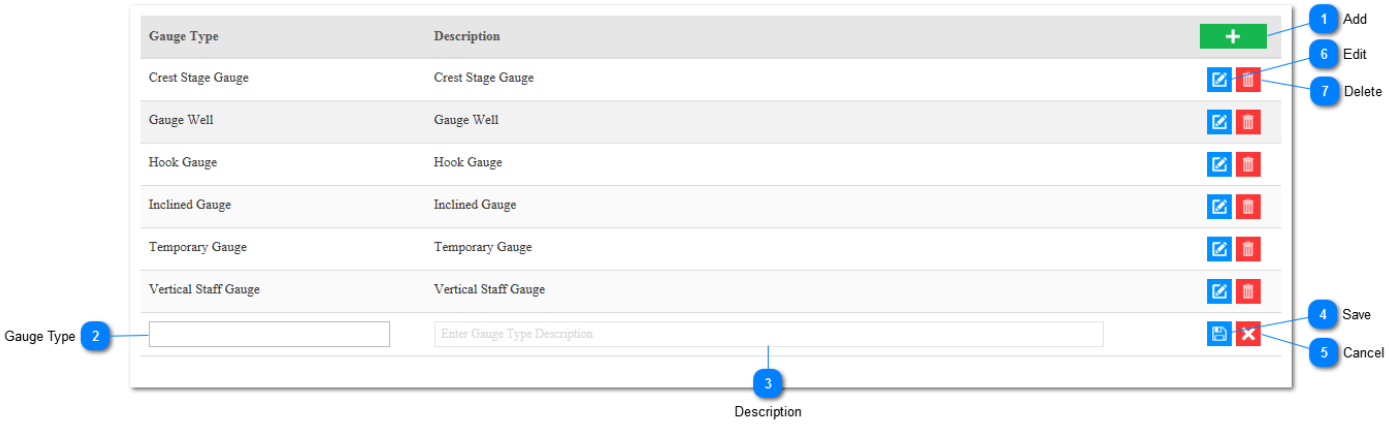
10 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.11 Gauge Type

User can add new Gauge Types and can also edit, view and delete already created Gauge type through this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Gauge Type



Adding a new Gauge Type

1

Add

- Click on <Add> button adds a new row into the table for adding a new record.

2

Gauge Type

- User enters the Gauge type into ‘Gauge Type’ text field.
- Gauge Type is mandatory field for adding a new Gauge Type.

3

Description

- User enters the description of the new gauge type into ‘Description’ text field.

4

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

5 **Cancel**

- By clicking on the Cancel image, system moves the user to Gauge Type page without saving the record.

6 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

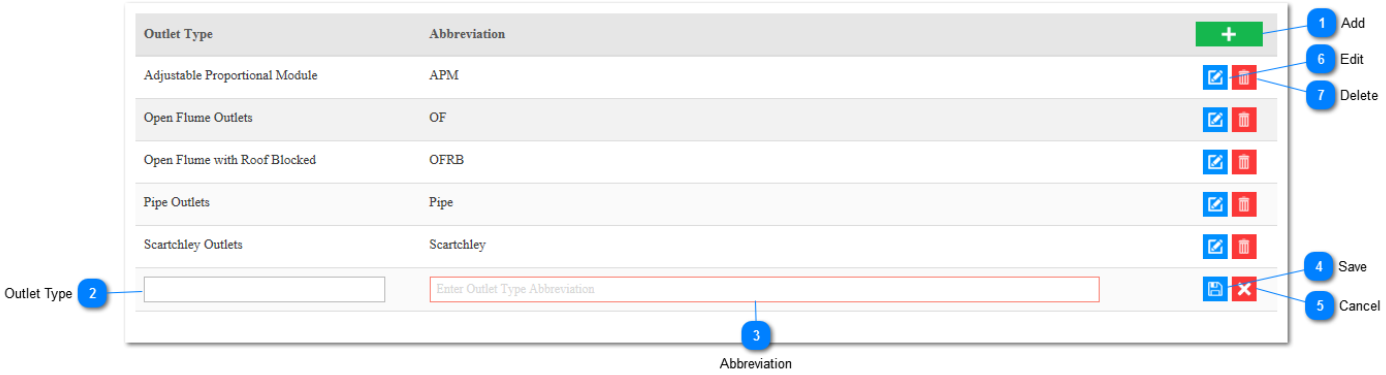
7 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.12 Outlet Type

User can add new Outlet Types and can also edit, view and delete already created Outlet Type using this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Outlet Type



Adding a new Outlet Type

1

Add

- Click on <Add> button adds a new row into the table for adding a new record.

2

Outlet Type

- User enters outlet type into 'Outlet Type' text field.
- Outlet Type is mandatory field for adding a new Outlet Type.

3

Abbreviation

- User enters the abbreviation for the outlet type into 'Abbreviation' text field.
- Abbreviation is mandatory field for adding a new Outlet Type.

4

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

5 **Cancel**

- By clicking on the Cancel image, system moves the user to Outlet Type page without saving the record.

6 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

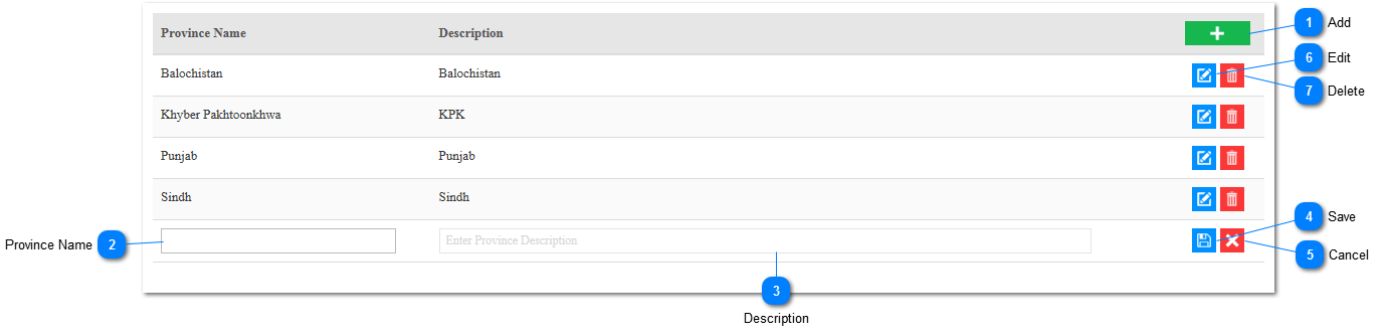
7 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.13 Province

User can add new Province and can also edit, view and delete already created Province through this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Province



Adding a new Province

1

Add

- Click on <Add> button adds a new row into the table for adding a new record.

2

Province Name

- User enters the name of new province into ‘Province Name’ text field.
- Province Name is mandatory field for adding a new Province.

3

Description

- User enters the description of new province into ‘Description’ text field.

4

Save

- Click on ‘Save’ image, system verify all the required fields.

- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

5 **Cancel**

- By clicking on the Cancel image, system moves the user to Province page without saving the record.

6 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

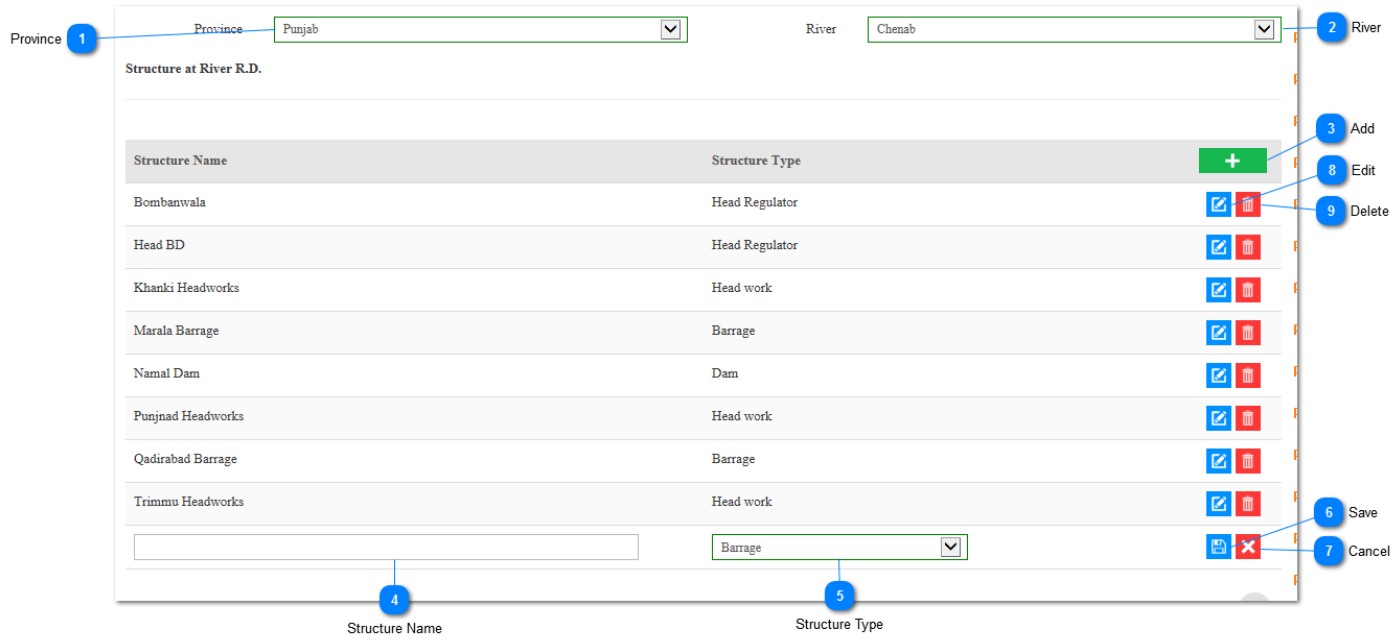
7 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

1.14 Structure

User can add a new Structure and can also edit, view and delete already created Structure using this page.

How to Access: Main Menu -> Irrigation Network - > Reference Data->Structure



Adding a new Structure

1

Province

- User selects a province into ‘Province’ dropdown.

2

River

- User selects a river into ‘River’ dropdown
- System displays already created structures for that record into a table.

3

Add

- Click on <Add> button adds a new row into the table for adding a new record.

4

Structure Name

- User enters structure name into ‘Structure Name’ text field.

5

Structure Type

- User selects a structure type from ‘Structure Type’ dropdown.
- Structure Type is mandatory field for adding a new Structure.

6

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

7

Cancel

- By clicking on the Cancel image, system moves the user to Structure page without saving the record.

8

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

9

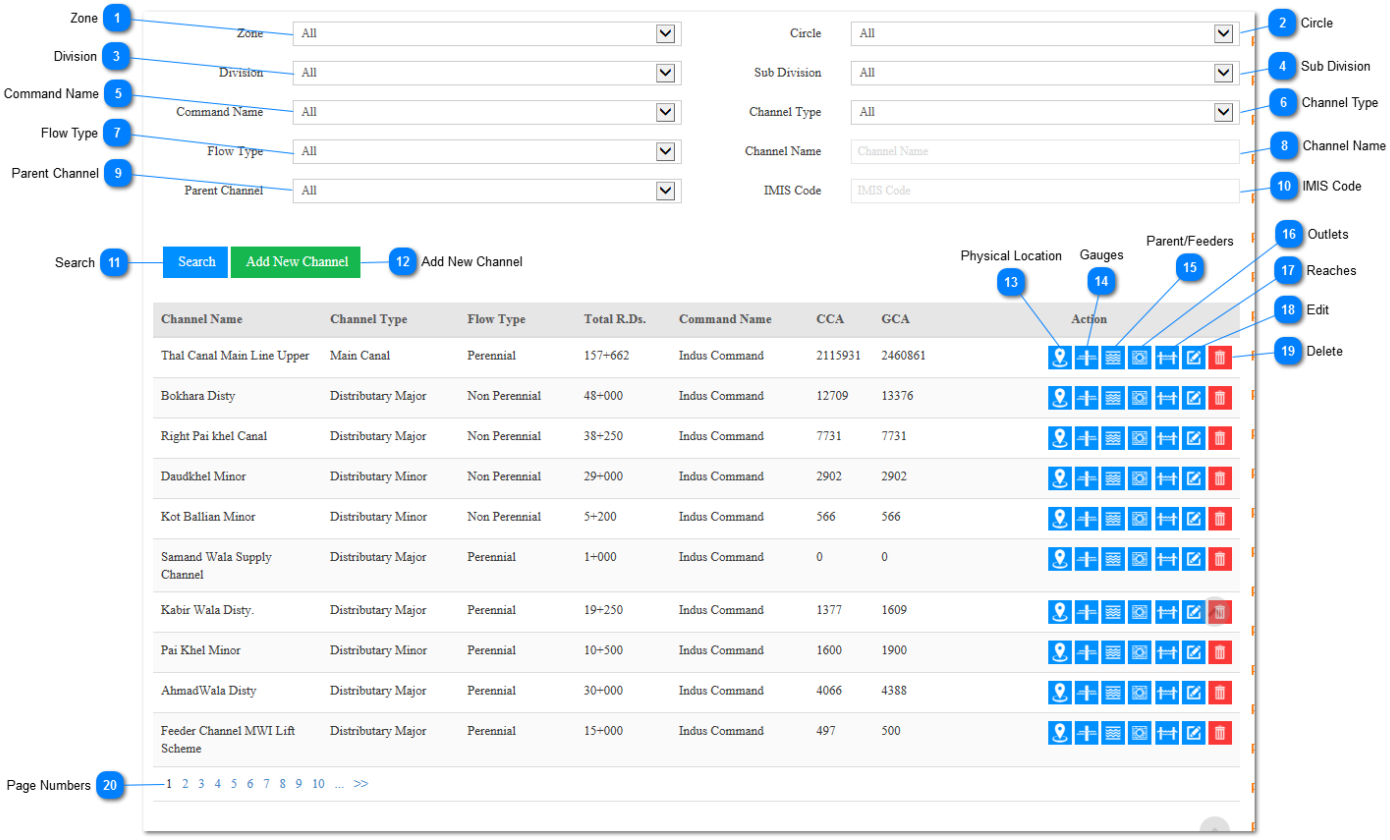
Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

2. Search Channel

This part of the Irrigation Network module provides an interface to search, edit, delete and view already created channels. Channels can be searched by its irrigational boundary, Command Name, Channel Type, Flow Type, Channel Name, Parent Channel and by IMIS Code. A new channel and its parameters like Physical Location, Gauge Information, Parent Feeder Information, Outlets and Reaches are also added/edited from this module.

How to Access: Main Menu -> Irrigation Network - > Channel Data



1 Zone

- User selects a zone from the list of already created zones into ‘Zone’ dropdown.
- System populates all the circles of that selected zone into ‘Circle’ dropdown.

2 Circle

- User selects a circle from the list of already created circles into ‘circle’ dropdown.
- System populates all the divisions of that selected circle into ‘Division’ dropdown.

3

Division

- User selects a division from the list of already created Divisions into ‘Division’ dropdown.
- System populates all the sub divisions of that selected division into ‘Sub Division’ dropdown.

4

Sub Division

- User selects a sub division from the list of already created sub divisions into ‘Sub Division’ dropdown.
- System populates all the channels of that selected sub division.

5

Command Name

- User selects command name into ‘Command Name’ dropdown.
- System populates all the channels of that selected Command Name.

6

Channel Type

- User selects channel type into ‘Channel Type’ dropdown.
- System populates all the channels on the basis of selected channel type.

7

Flow Type

- User selects flow type into ’Flow Type’ dropdown.

8

Channel Name

- User enters channel name or a name similar to the Channel Name into 'Channel Name' text field.
- System populates all the channels like the name entered into Channel Name text field.

9

Parent Channel

- User selects parent channel into 'Parent Channel' dropdown.
- System populates all the channels on the basis of selected parent channel

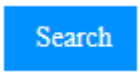
10

IMIS Code

- User enters IMIS code into 'IMIS Code' text field.
- System populates the record of the channel with matching IMIS Code.

11

Search



- Click on <Search> Button.
- System displays the records as per the search criteria given by the user.
- If there is no record against the entered search criteria, system shows the message ***'No record found'***
- System displays all records if no search criteria is provided

12

Add New Channel

- Click on <Add New Channel> button, system navigates the user to channel add screen.

13

Physical Location

- Click on ‘Physical location’ button, system navigates the user to physical location Page of that specific channel

14 **Gauges**

- Click on ‘Gauge’ button navigates the user to gauge Page of that specific channel

15 **Parent/Feeders**

- Click on ‘Parent/Feeder’ button navigates the user to Parent Feeder Channel information Page of that specific channel

16 **Outlets**

- Click on ‘Outlets’ button navigates the user to outlets Page of that specific channel

17 **Reaches**

- Click on ‘Reaches’ button navigates the user to reaches Page of that specific channel

18 **Edit**

- Click on edit’ button navigates the user to Add/ edit Page of that specific channel

19 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

20

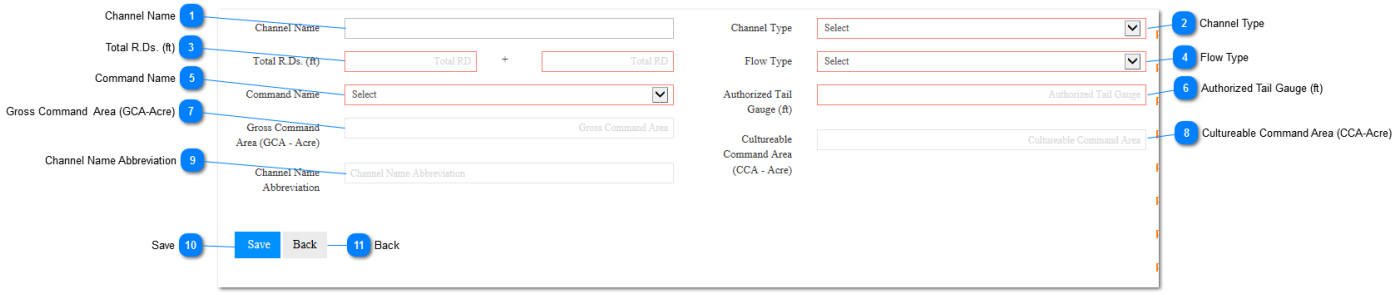
Page Numbers

1 2 3 4 5 6 7 8 9 10 ... >>

- Click on page numbers to move the user to other pages.

2.1 Add New Channel

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Add New Channel



Adding a new Channel

1

Channel Name

- User enters the name of new channel into ‘Channel Name’ text field.
- Channel Name is mandatory field for adding a new Channel.

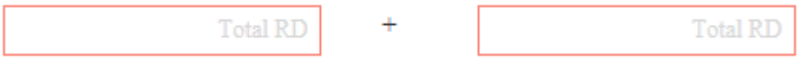
2

Channel Type

- User selects the channel type for the new channel into ‘Channel Type’ dropdown.
- Channel Type is mandatory field for adding a new Channel.

3

Total R.Ds. (ft)



- User enters the total R.D of the channel into Total R.D numeric fields. On the left side box, user enter the number which is in thousands e.g. if user enters 25, it means 25 thousand and on the right side box, user enter the R.D which is the number it meant to be e.g. if user enters 200, it means 200 ft. Note that user cannot enter any value bigger than 999 in right side box since it would add one in left side box.
- Total R.Ds is mandatory field for adding a new Channel.

4

Flow Type

- User selects the flow type for that channel into ‘Flow Type’ dropdown.
- Flow Type is mandatory field for adding a new Channel.

5

Command Name

- User selects the command name into ‘Command Name’ dropdown.
- Command Name is mandatory field for adding a new Channel.

6

Authorized Tail Gauge (ft)

- User enters the authorized tail gauge of the channel into ‘Authorized tail Gauge’ numeric field.
- Authorized Tail Gauge is mandatory field for adding a new Channel.

7

Gross Command Area (GCA-Acre)

- User enters the Gross Command Area of the channel into ‘Gross Command Area’ numeric field.
- Gross Command Area is mandatory field for adding a new Channel.

8

Cultureable Command Area (CCA-Acre)

- User enters the Cultureable Command Area of the channel into ‘Cultureable Command Area’ numeric field.
- Cultureable Command Area is mandatory field for adding a new Channel.

9

Channel Name Abbreviation

- User enters the channel name abbreviation into ‘Channel Name Abbreviation’ text field.

10

Save

- Click on <Save> button, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

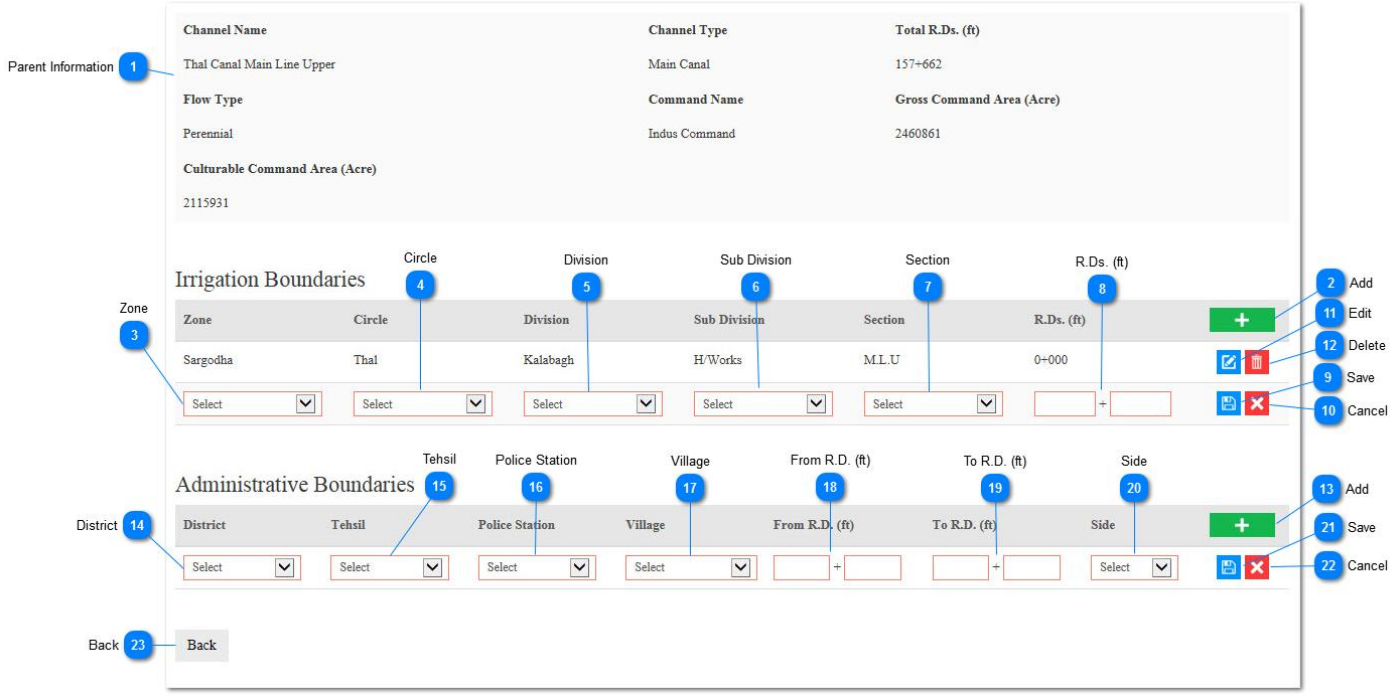
11 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.2 Physical Location

Physical location is assigned to a channel in which user defines the irrigational and administrative boundaries of the channel. System consider the lowest R.D point as the starting point or Head Gauge of the Channel and the highest R.D as the Ending point or Tail Gauge of the channel. System populates all the districts into the Administrative boundary of selected Divisions in Irrigation Boundary.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Physical Location



Adding Irrigational Boundaries

1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Gross Command Area (Acre)**
Perennial	Indus Command	2460861
Culturable Command Area (Acre)		
2115931		

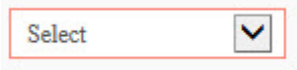
- System displays the basic information of that particular channel added on channel add/edit screen.

2 Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

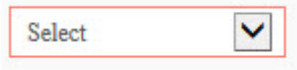
Zone



- User selects a zone from zone dropdown.
- All the circles associated with selected zone will be populated into Circle dropdown.
- Zone is mandatory field for adding a new irrigational boundary.

4

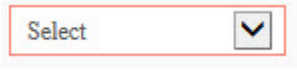
Circle



- User selects a circle into ‘Circle’ dropdown.
- All the Divisions associated with the above Circle will be populated into Division dropdown.
- Circle is mandatory field for adding a new irrigational boundary.

5

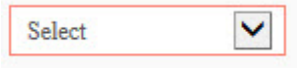
Division



- User selects a division into ‘Division’ dropdown.
- All the sub divisions associated with the above Division will be populated into ‘Sub Division’ dropdown.
- Division is mandatory field for adding a new irrigational boundary.

6

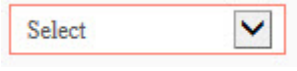
Sub Division



- User selects a division into ‘Sub Division’ dropdown.
- All the sections associated with the above sub division will be populated in a table.
- Sub Division is mandatory field for adding a new irrigational boundary.

7

Section



- User selects a section into ‘Section’ dropdown.

- Section is mandatory field for adding a new irrigational boundary.
- Section is a unique field. System does not allow the user to add the same section twice against a channel.

8

R.Ds. (ft)

- User enters the R.D of the channel into that specific section. It would represent the entering R.D. means the R.D from which a channel enters into the given Section.
- R.Ds is mandatory field for adding a new irrigational boundary.
- System does not allow the user to add R.Ds value greater than Authorized Tail Gauge value.

9

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

10

Cancel

- By clicking on the Cancel image, system moves the user to Physical Boundary page without saving the record.

11

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

12

Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

Adding Administrative Boundaries

13 **Add**

- Click on <Add> button adds a new row into the table for adding a new record.

14 **District**

- User selects a district into ‘District’ dropdown.
- System populates all the tehsils associated to selected district into ‘Tehsil’ dropdown.
- District is mandatory field for adding a new administrative boundary.

15 **Tehsil**

- User selects a tehsil into ‘tehsil’ dropdown.
- System populates the tehsils of all selected Divisions into irrigation boundary.
- All the police stations associated to the selected Tehsil populates into ‘Police station dropdown.
- Tehsil is mandatory field for adding a new administrative boundary.

16 **Police Station**

- User selects a police station into ‘Police Station’ dropdown.
- All the villages associated to the selected Police Station populates in a table.
- Police Station is mandatory field for adding a new administrative boundary.

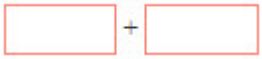
17 **Village**

- User selects the village into ‘Village’ dropdown.
- Village is mandatory field for adding a new administrative boundary.

18 **From R.D. (ft)**

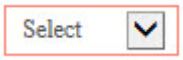
- User enters R.D of the channel entering into the village.
- R.Ds is mandatory field for adding a new administrative boundary.
- System does not allow the user to add R.Ds value greater than Authorized Tail Gauge value.

19 **To R.D. (ft)**



- User enters the last R.D of the channel into that village.
- R.Ds is mandatory field for adding a new administrative boundary.
- System does not allow the user to add R.Ds value greater than Authorized Tail Gauge value.

20 **Side**



- User selects the side of the channel into ‘Side’ dropdown.
- Side is mandatory field for adding a new administrative boundary.

21 **Save**

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

22 **Cancel**

- By clicking on the Cancel image, system moves the user to Physical Boundary page without saving the record.

23 **Back**

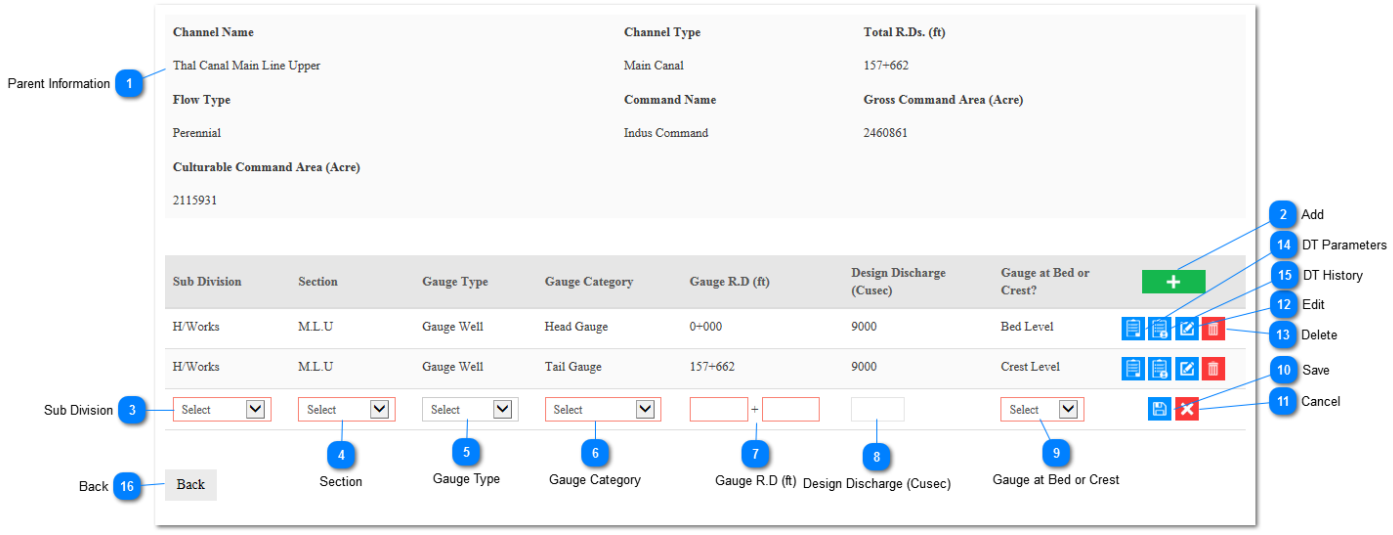
- Click on <Back> button discard all unsaved changes

- System navigates the user to channel search screen.

2.3 Gauges

System consider lowest R.D point as the head gauge and highest R.D point as tail gauge of the channel defined into irrigation boundary page. System allows the user to add different gauges according to gauge type with in the R.D range of irrigational boundary of the channel.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Gauges



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Gross Command Area (Acre)**
Perennial	Indus Command	2460861
Culturable Command Area (Acre)		
2115931		

- System displays parent information in read only form

2 Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

Sub Division

- User selects a division into ‘Sub Division’ dropdown.
- System shows the subdivisions selected into irrigation boundaries of that channel.
- All the sections associated with the above sub division will be populated in ‘Section’ dropdown.
- Sub Division is mandatory field for adding a new Gauge.

4

Section

- User selects the Section into ‘Section’ dropdown.
- Section is mandatory field for adding a new Gauge.

5

Gauge Type

- System displays all gauge types from reference data gauge type screen.
- User selects the Gauge Type into ‘Gauge Type’ dropdown.
- Gauge Type is mandatory field for adding a new Gauge.

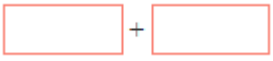
6

Gauge Category

- User selects the Gauge category into ‘Gauge Category’ dropdown.
- Gauge Category is mandatory field for adding a new Gauge.

7

Gauge R.D (ft)



- User enters the R.D of the channel into that specific section.
- System auto populate the Gauge RD on the basis of Gauge Category field. e.g. in case of Sectional Gauge, Gauge R D will be Section R D.
- Gauge R.D is mandatory field for adding a new Gauge.

8

Design Discharge (Cusec)

- User enters the design discharge of the gauge into ‘Design Discharge’ numeric field.

9 **Gauge at Bed or Crest**

- User selects the gauge at bed or crest option into ‘Gauge at Bed or Crest’ dropdown.
- Gauge at Bed or Crest is mandatory field for adding a new Gauge.

10 **Save**

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

11 **Cancel**

- By clicking on the Cancel image, system moves the user to Gauge Information page without saving the record.

12 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

13 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

14 **DT Parameters**

- Click on DT parameters button navigates the user to DT parameters page.

15 **DT History**

- Click on DT parameters button navigates the user to DT History page.

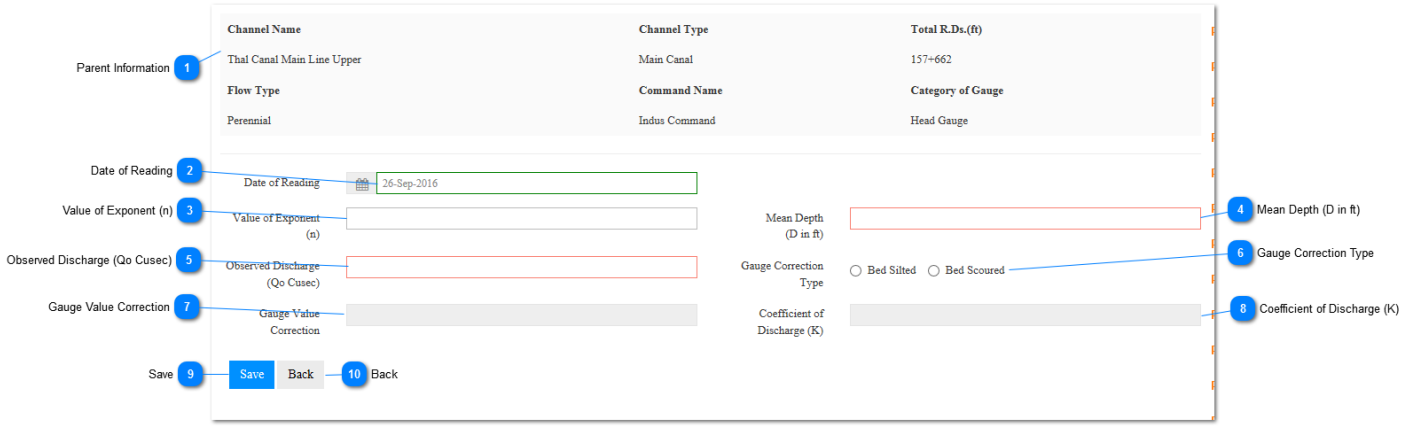
16 **Back**

- Click on <Back> button discard all unsaved changes.
- System navigates the user to channel search screen.

2.4 DT Parameters

Discharge Table Parameters are associated with each Gauge defining the formula for calculating discharge value against entered gauge value. System allows the user to add DT parameters according to gauge at Bed or Crest.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Gauges -> DT Parameters



1 Parent Information

Channel Name	Channel Type	Total R.Ds.(ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Category of Gauge**
Perennial	Indus Command	Head Gauge

- System displays parent information such as Channel Name, Channel Type, Total R.Ds, Flow Type, Command Type, Category of Gauge in read only form.

2 Date of Reading

- User selects the date of reading into ‘DT parameters into Date of Reading’ calendar dropdown.
- System shows current date by default into calendar dropdown.

3 Value of Exponent (n)

- User enters the numeric value of exponent into 'Value of Exponent' numeric field. Presently, value of n is 1.67 throughout the system
- Value of exponent is mandatory field for adding a new DT parameters.

4

Mean Depth (D in ft)

- User enters the numeric value of mean depth into 'Mean Depth' numeric field.
- Mean Depth is mandatory field for adding a new DT parameters.

5

Observed Discharge (Qo Cusec)

- User enters the numeric value of Observed Discharge into 'Observed Discharge' numeric field.
- Observed Discharge is mandatory field for adding a new DT parameters.

6

Gauge Correction Type

◯ Bed Silted ◯ Bed Scoured

- User selects the gauge correction type by selecting either of 'Bed Silted and Bed Scoured' radio buttons.
- System enables the 'Gauge Value Correction' numeric field.

7

Gauge Value Correction

- User enters the gauge correction value into 'Gauge Value Correction' numeric field.
- Gauge value correction is mandatory field for adding a new DT parameters.
- System calculates this field by following formulas.
  Qo = k * d ^ n
  In case of Bed Silted, the value of Gauge Value Correction is subtracted from mead depth 'd' and in case of Bed Scoured, the value of Gauge Correction is added in the mean depth 'd'.

8

Coefficient of Discharge (K)

- System auto calculates the Coefficient of Discharge field.

9

Save

Save

- Click on ‘Save’ button, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

10

Back

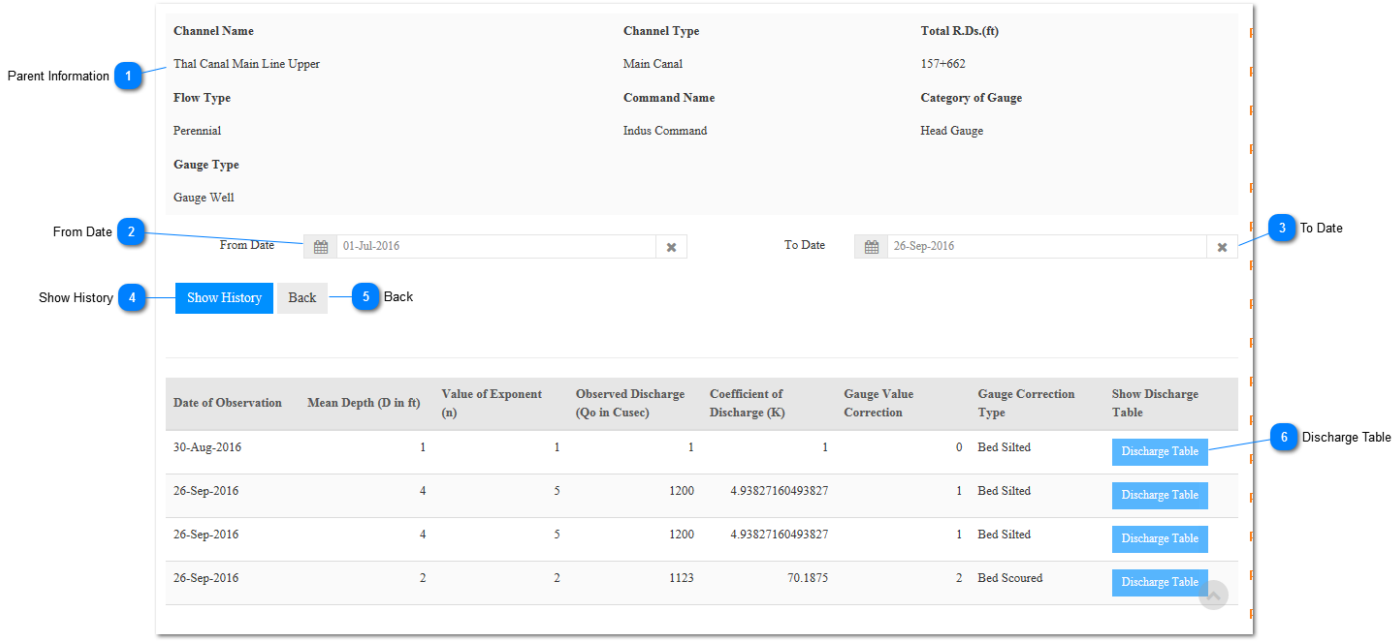
Back

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.5 DT History

System maintains the history of DT Parameter’s into DT History page. User can view current DT parameters and previous DT parameters by selecting different dates into calendars dropdowns.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Gauges -> DT History



1

Parent Information

Channel Name	Channel Type	Total R.Ds.(ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Category of Gauge**
Perennial	Indus Command	Head Gauge
Gauge Type		
Gauge Well		

- System displays parent information in read only form.

2

From Date

- User selects the starting date into ‘From Date’ calendar dropdown.
- System shows “1 – current date” into ‘From Date’ calendar dropdown.

3

To Date

- User selects the ending date into ‘To Date’ calendar dropdown.
- System shows current date into ‘To Date’ calendar dropdown.

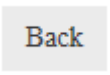
4

Show History

- Click on <Show History> button shows the results between the above selected dates.

5

Back



- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

6

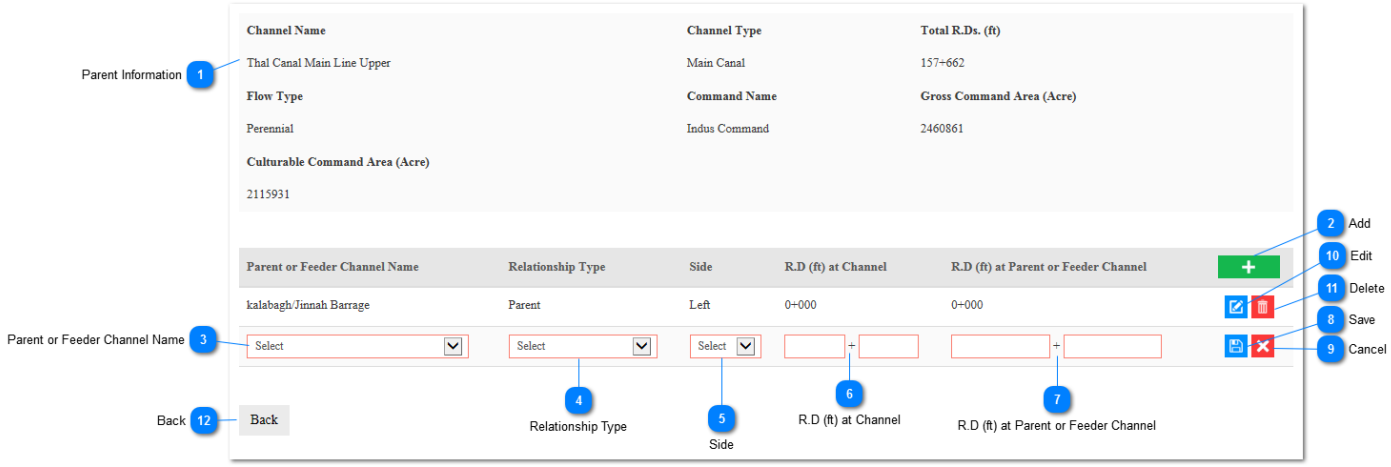
Discharge Table

- Click on <Discharge Table> button navigates the user to Discharge Table page.

2.6 Parent/Feeders

System shows all the channels present into the divisions selected into irrigation boundary of this channels. System also shows all barrages Dams structures which are used as a parent at lowest RD point of the channel. System allows the user to add a parent at channel's lowest R.D point and feeder at the rest of the R.Ds points. System prevents the user to add two channels as feeder on same side and same RD.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Parent/Feeder



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Gross Command Area (Acre)**
Perennial	Indus Command	2460861
Culturable Command Area (Acre)		
2115931		

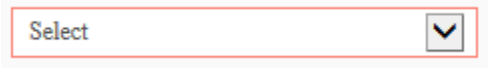
- System displays parent information in read only form.

2 Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

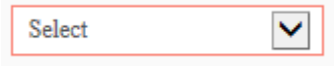
Parent or Feeder Channel Name



- User selects the parent or feeder channel from ‘Parent or Feeder Channel Name’ dropdown.
- System shows the list of all barrages/headworks and all the channels present into the current channel’s division.
- Parent or Feeder Channel Name is mandatory field for adding a new Parent/Feeder.

4

Relationship Type



- User selects the relationship type from ‘Relationship Type’ dropdown.
- Relationship Type is mandatory field for adding a new Parent/Feeder.

5

Side

- User selects the side into ‘Side’ dropdown.
- Side is mandatory field for adding a new Parent/Feeder.

6

R.D (ft.) at Channel

- User enters the RD of the channel at which channel connects with his parent/feeder channel.
- System auto populate this field in case of parent channel. i.e. head gauge R D of this channel
- R.D at Channel is mandatory field for adding a new Parent/Feeder.

7

R.D (ft.) at Parent or Feeder Channel

- User enters the RD of the channel at which parent/feeder channel connects with this channel.
- System auto populate this field in case of feeder channel. i.e. Tail gauge R D of feeder channel
- R.D at Parent or Feeder Channel is mandatory field for adding a new Parent/Feeder.

8

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

9 **Cancel**

- By clicking on the Cancel image, system moves the user to Parent/Feeder page without saving the record.

10 **Edit**

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

11 **Delete**

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

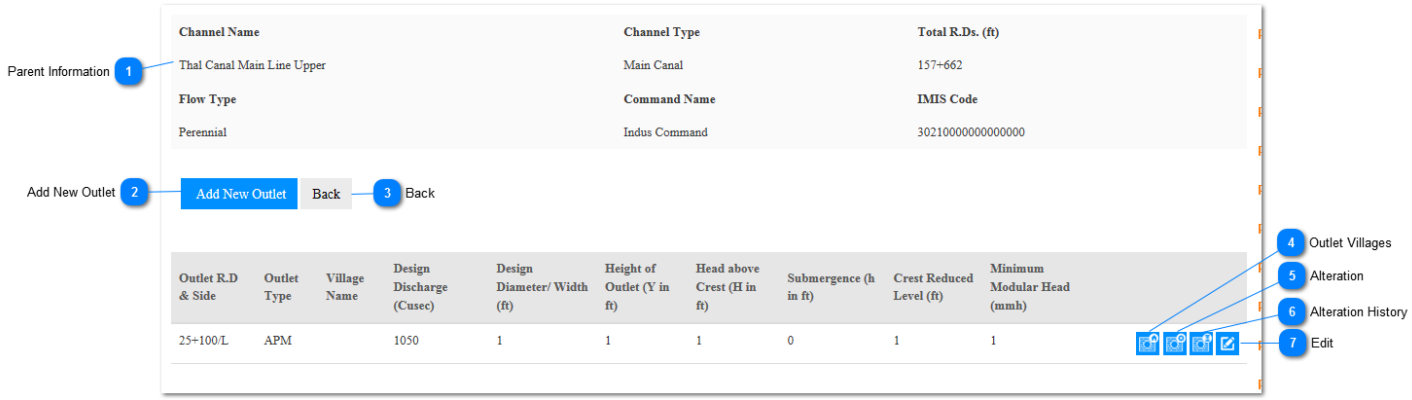
12 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.7 Outlets

System allows the user to add outlet within the range of lowest R.D point and Highest R.D point of the channel. System maintains the list of villages attached to the Outlet and complete alteration history of outlets. The Outlet once added can be altered only and user can inactive the outlet but cannot be deleted.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Outlets



Adding a new Outlet

1

Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**IMIS Code**
Perennial	Indus Command	30210000000000000

- System displays parent information in read only form.

2

Add New Outlet

Add New Outlet

- Click on <Add new Outlet> button navigates the user to Outlet add/edit page.

3

Back

Back

- Click on <Back> button discard all unsaved changes

- System navigates the user to channel search screen.

4

Outlet Villages

- Click on Outlet Village image navigates the user to Outlet Village page.

5

Alteration

- Click on Alteration image navigates the user to Alteration page.

6

Alteration History

- Click on Alteration History image navigates the user to Alteration History page.

7

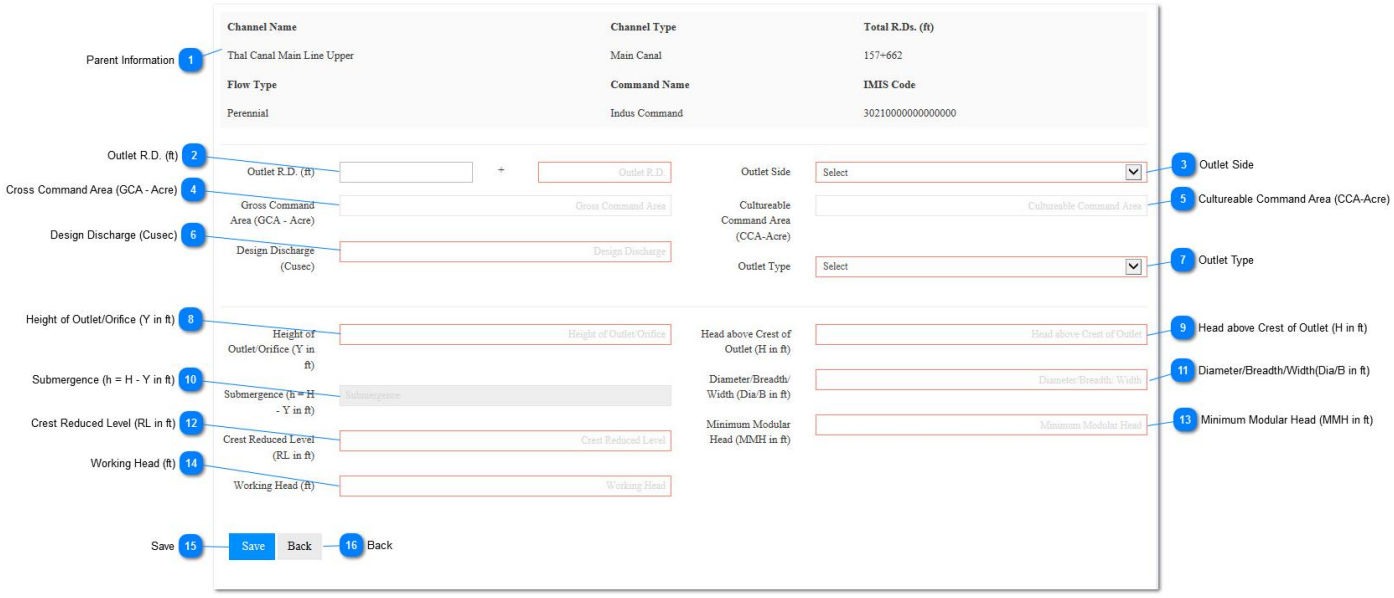
Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

2.8 Add New Outlet

System adds a new outlet on a specific R.D and only one Outlet is allowed to be added on one R.D and on same Side. After Adding Outlets are altered but never deleted.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Outlets -> Add new Outlet

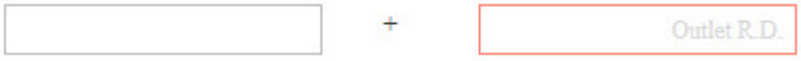


1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**IMIS Code**
Perennial	Indus Command	30210000000000000

- System displays parent information in read only form.

2 Outlet R.D. (ft.)



- User enters the R.D of the Outlet into ‘Outlet R.D’ numeric fields.
- System allows the user to enter Outlet R.D with in the R.D range of irrigation boundary of that channel.
- Outlet R.D is mandatory field for adding a new Outlet.

3

Outlet Side

- User selects the outlet side into ‘Outlet Side’ dropdown.
- Outlet side is mandatory field for adding a new Outlet.

4

Gross Command Area (GCA - Acre)

- User enters the Gross Command Area of the Outlet into ‘Gross Command Area’ numeric field.

5

Cultureable Command Area (CCA-Acre)

- User enters the Cultureable Command Area of the Outlet into ‘Cultureable Command Area’ numeric field.

6

Design Discharge (Cusec)

- User enters the design discharge of the Outlet into ‘Design Discharge’ numeric field.
- Design Discharge is mandatory field for adding a new Outlet.

7

Outlet Type

- User selects the type of the Outlet into ‘Outlet Type’ dropdown.
- Outlet Type is mandatory field for adding a new Outlet.

8

Height of Outlet/Orifice (Y in ft.)

- User enters the height of Outlet into ‘height of Outlet/Orifice’ numeric field.
- Height of Outlet/Orifice is mandatory field for adding a new Outlet.

9

Head above Crest of Outlet (H in ft.)

- User enters the Head above crest of the Outlet into ‘Head above crest of the Outlet’ numeric field.
- Head above crest of the Outlet is mandatory field for adding a new Outlet

10

Submergence (h = H - Y in ft.)

- System auto calculates the submergence field.

11

Diameter/Breadth/Width (Dia/B in ft.)

- User enters the Diameter/Breadth/Width of Outlet into ‘Diameter/Breadth/Width’ numeric field Diameter/Breadth/width Minimum Modular Head.

12

Crest Reduced Level (RL in ft.)

- User enters the Crest Reduced Level into ‘Crest Reduced Level’ numeric field.
- Crest Reduced Level is mandatory field for adding a new Outlet.

13

Minimum Modular Head (MMH in ft.)

- User enters the Minimum Modular Head of Outlet into ‘Minimum Modular Head’ numeric field. Minimum Modular Head is mandatory field for adding a new Outlet.

14

Working Head (ft.)

- User enters the Working Head of Outlet into ‘Working Head’ numeric field. Working Head is mandatory field for adding a new Outlet.

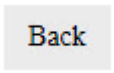
15

Save

- Click on <Save> button, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

16

Back

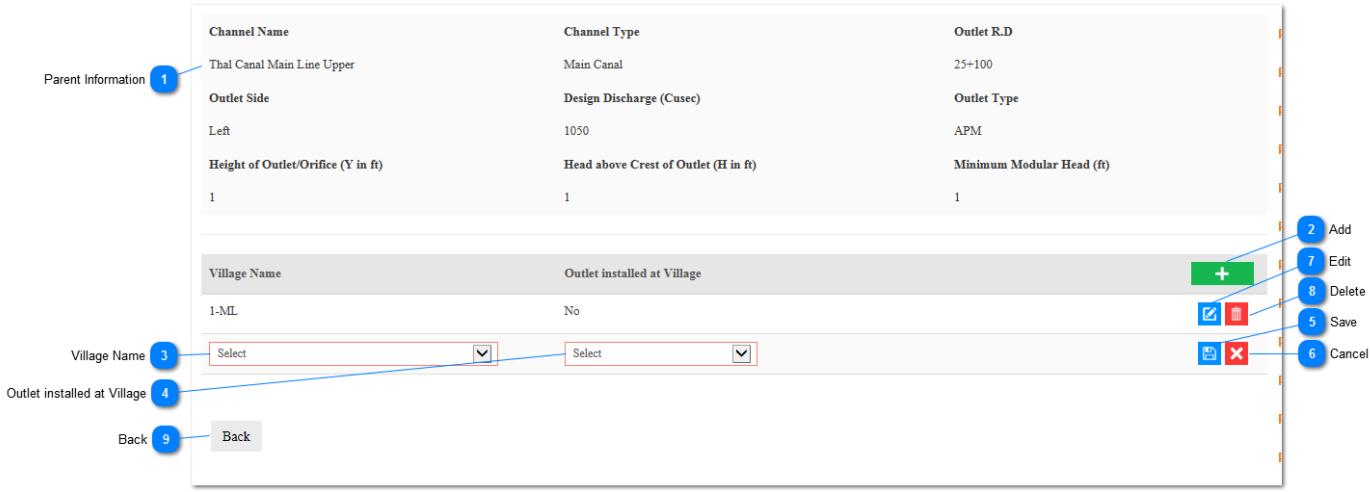


- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.9 Outlet Villages

System allows the user to add all the villages into the range of specific Outlet. System ask the user that whether this outlet is installed on this village or not. System only allows one Yes option for a single village. Other associated Villages attached by this Outlet having No Outlet installed option.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Outlets -> Outlet Villages



1 Parent Information

Channel Name	Channel Type	Outlet R.D
Thal Canal Main Line Upper	Main Canal	25+100
Outlet Side	**Design Discharge (Cusec)**	**Outlet Type**
Left	1050	APM
Height of Outlet/Orifice (Y in ft)	**Head above Crest of Outlet (H in ft)**	**Minimum Modular Head (ft)**
1	1	1

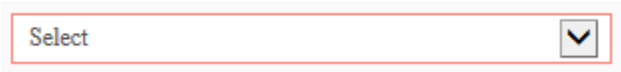
- System displays parent information in read only form.

2 Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

Village Name



- User selects the villages name into ‘Village Name’ dropdown.
- Village Name is mandatory field for adding a village.

4

Outlet installed at Village

- User selects the option yes or no into ‘Outlet installed at Village’ dropdown.
- Outlet installed at Village is mandatory field.
- Option ‘Yes’ cannot be applied for two villages for the same Outlet.

5

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

6

Cancel

- By clicking on the Cancel image, system moves the user to Outlet Villages page without saving the record.

7

Edit

- Click on ‘Edit’ image to edit the existing record.
- System opens the record into editable form.

8

Delete

- Click on ‘Delete’ image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

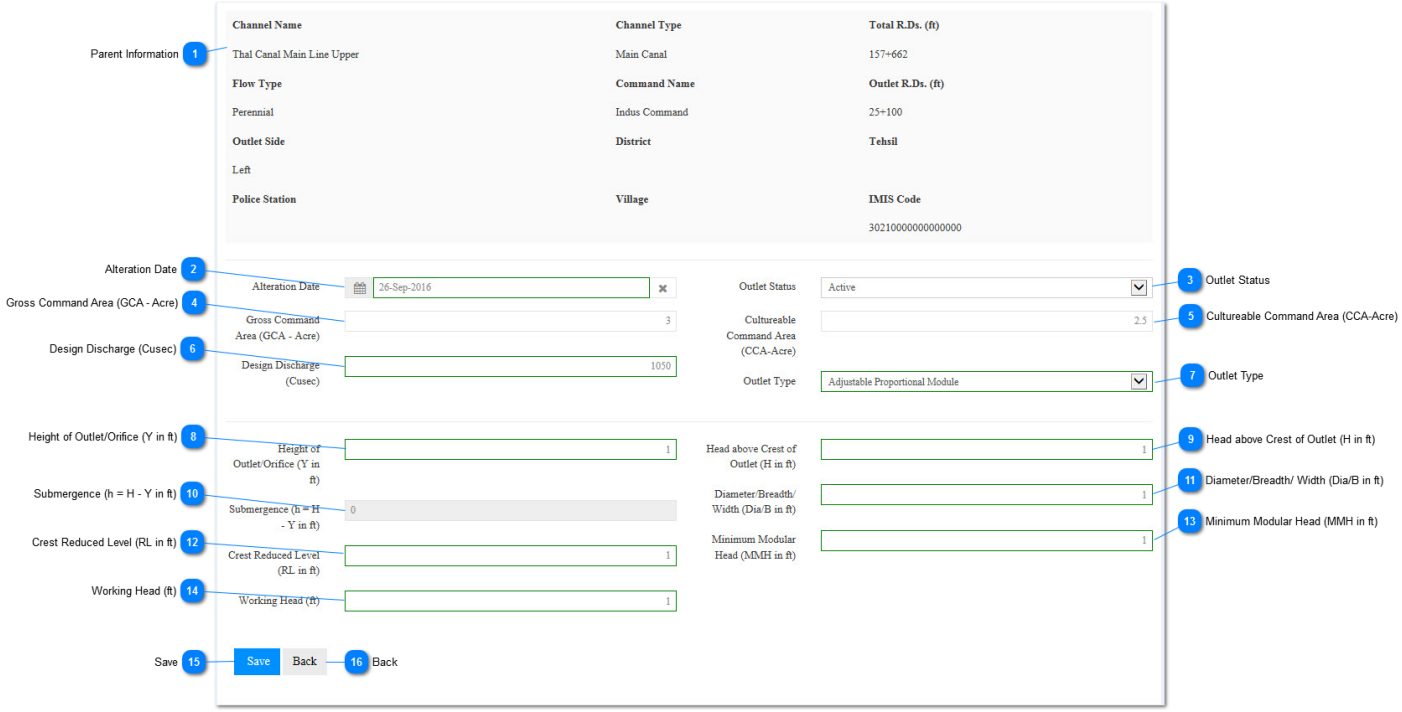
9 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.10 Outlet Alteration

System allows the User to change parameters of the Outlet. User can disable the Outlet by changing the status of the outlet. i.e. Inactive

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Outlets -> Outlet Alteration



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**Outlet R.Ds. (ft)**
Perennial	Indus Command	25+100
Outlet Side	**District**	**Tehsil**
Left		
Police Station	**Village**	**IMIS Code**
		30210000000000000

- System displays parent information in read only form.

2

Alteration Date

- User selects the date of alteration into ‘Alteration date’ calendar dropdown.

3

Outlet Status

- User selects the outlet status into ‘Outlet Status’ dropdown.

4

Gross Command Area (GCA - Acre)

- User enters the Gross Command Area of the Outlet into ‘Gross Command Area’ numeric field.

5

Cultureable Command Area (CCA-Acre)

- User enters the Cultureable Command Area of the Outlet into ‘Cultureable Command Area’ numeric field.

6

Design Discharge (Cusec)

- User enters the design discharge of the Outlet into ‘Design Discharge’ numeric field.

7

Outlet Type

- User selects the type of the Outlet into ‘Outlet Type’ dropdown.

8

Height of Outlet/Orifice (Y in ft.)

- User enters the height of Outlet into ‘height of Outlet/Orifice’ numeric field.

9 **Head above Crest of Outlet (H in ft.)**

- User enters the Head above crest of the Outlet into ‘Head above crest of the Outlet’ numeric field.

10 **Submergence (h = H - Y in ft.)**

- System auto calculates the submergence field.

11 **Diameter/Breadth/ Width (Dia/B in ft.)**

- User enters the Diameter/Breadth/Width of Outlet into ‘Diameter/Breadth/Width’ numeric field.

12 **Crest Reduced Level (RL in ft.)**

- User enters the Crest Reduced Level into ‘Crest Reduced Level’ numeric field.

13 **Minimum Modular Head (MMH in ft.)**

- User enters the Minimum Modular Head of Outlet into ‘Minimum Modular Head’ numeric field.

14 **Working Head (ft.)**

- User enters the Working Head of Outlet into ‘Working Head’ numeric field.

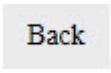
15

Save

- Click on <Save> button, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

16

Back

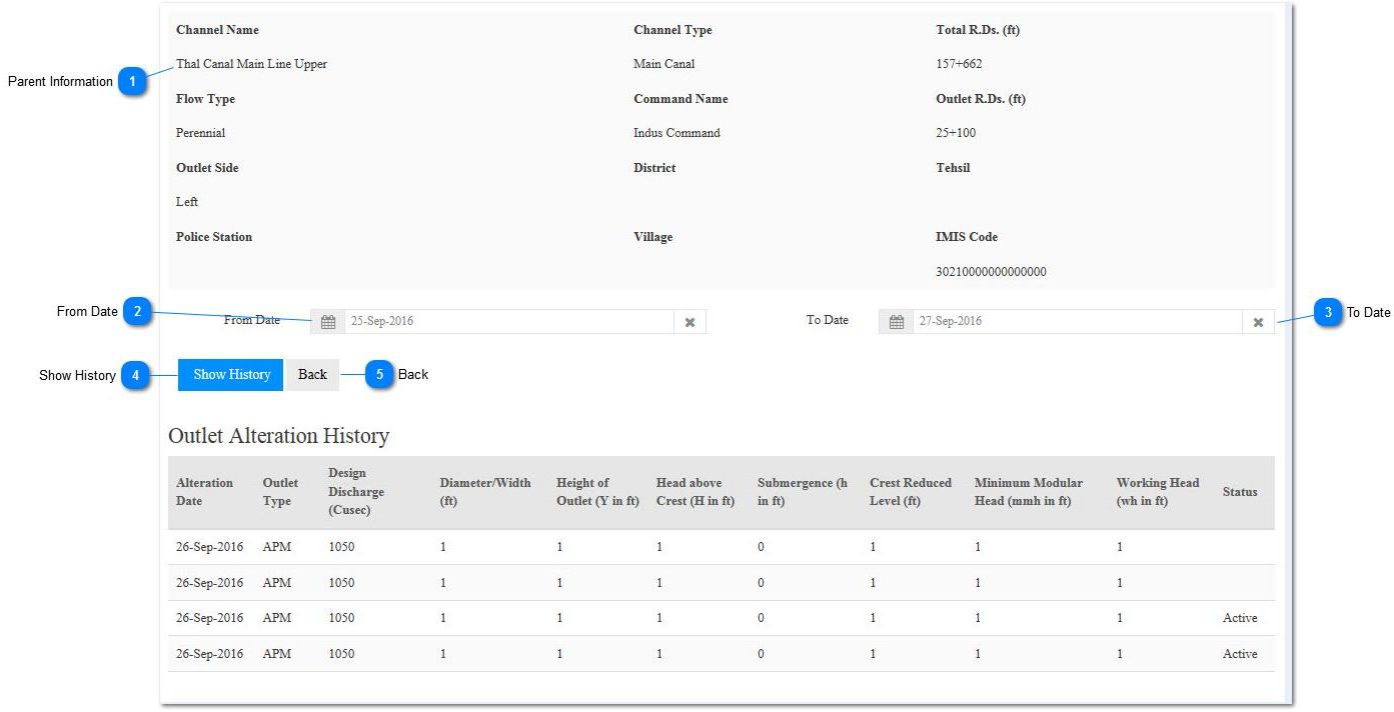


- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

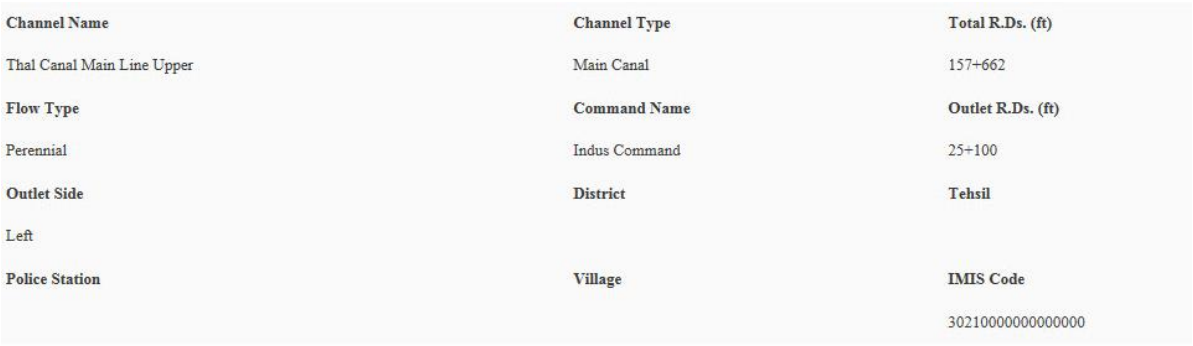
2.11 Outlet Alteration History

System allows the user to view complete Alteration history of that specific Outlet.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Outlets -> Outlet Alteration History



1 Parent Information



- System displays parent information in read only form.

2 From Date

- User selects the starting date into ‘From Date’ calendar dropdown.
- System shows “1 – current date” into ‘From Date’ calendar dropdown.

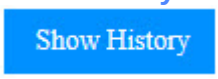
3

To Date

- User selects the ending date into ‘To Date’ calendar dropdown.
- System shows current date into ‘To Date’ calendar dropdown.

4

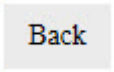
Show History



- Click on <Show History> button shows the results between the above selected dates.

5

Back

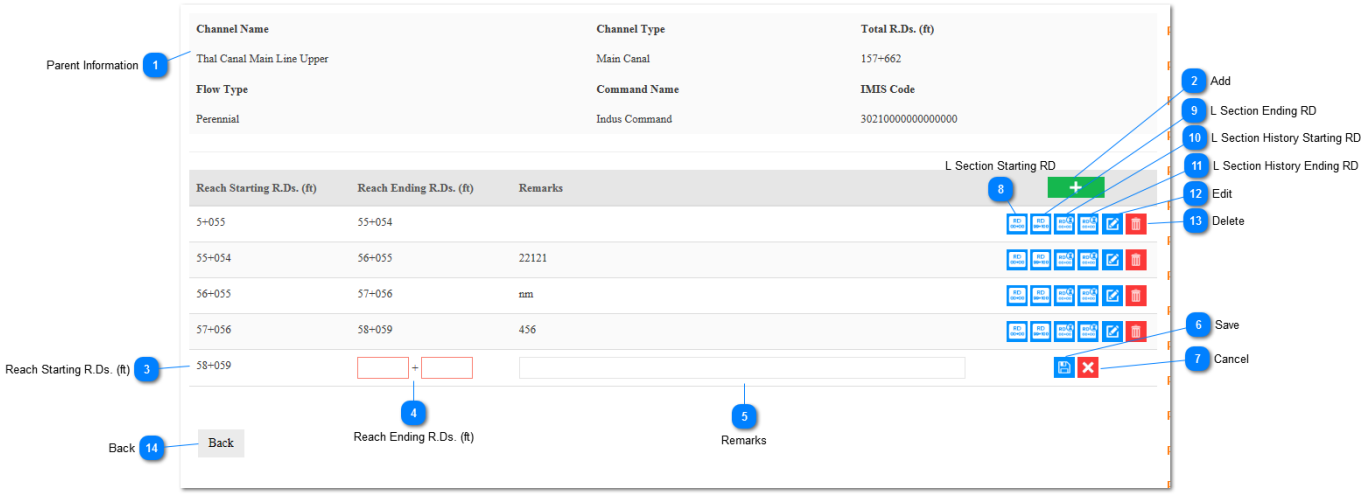


- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.12 Reaches

System adds, edits and deletes the reaches from this page. While adding first reach system auto populate reach starting R.D. i.e. lowest R.D point of the channel and Reach R.D cannot be more than channel Total R.D. If a user deletes a reach that lies between two reaches at different R.Ds. System auto insert the deleted starting R.D to the next reach.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Reaches



Add Reaches

1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Command Name**	**IMIS Code**
Perennial	Indus Command	30210000000000000

- System displays parent information in read only form.

2 Add

- Click on <Add> button adds a new row into the table for adding a new record.

3

Reach Starting R.Ds. (ft.)

58+059

- User enters the starting RD of the reach into ‘Reach Starting R.Ds’ numeric fields.
- System auto populate first reach starting R.D. i.e. The Head RD of the channel

4

Reach Ending R.Ds. (ft.)

+

- User enters the Ending RD of the reach into ‘Reach Ending R.Ds’ numeric fields.

5

Remarks

- User enters the remarks into ‘Remarks’ text field.

6

Save

- Click on ‘Save’ image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

7

Cancel

- By clicking on the Cancel image, system moves the user to Reaches page without saving the record.

8

L Section Starting RD

- Click on ‘L Section Starting RD’ image navigates the user to L Section Starting RD page.

9 **L Section Ending RD**

- Click on 'L Section Ending RD' image navigates the user to L Section Ending RD page.

10 **L Section History Starting RD**

- Click on 'L Section History Starting RD' image navigates the user to L Section History Starting RD page.

11 **L Section History Ending RD**

- Click on 'L Section History Ending RD' image navigates the user to L Section History Ending RD page.

12 **Edit**

- Click on 'Edit' image to edit the existing record.
- System opens the record into editable form.

13 **Delete**

- Click on 'Delete' image to delete the existing record.
- System display error message if any of the child entry has been entered for this specific record.
- System deletes the newly added record from the table.

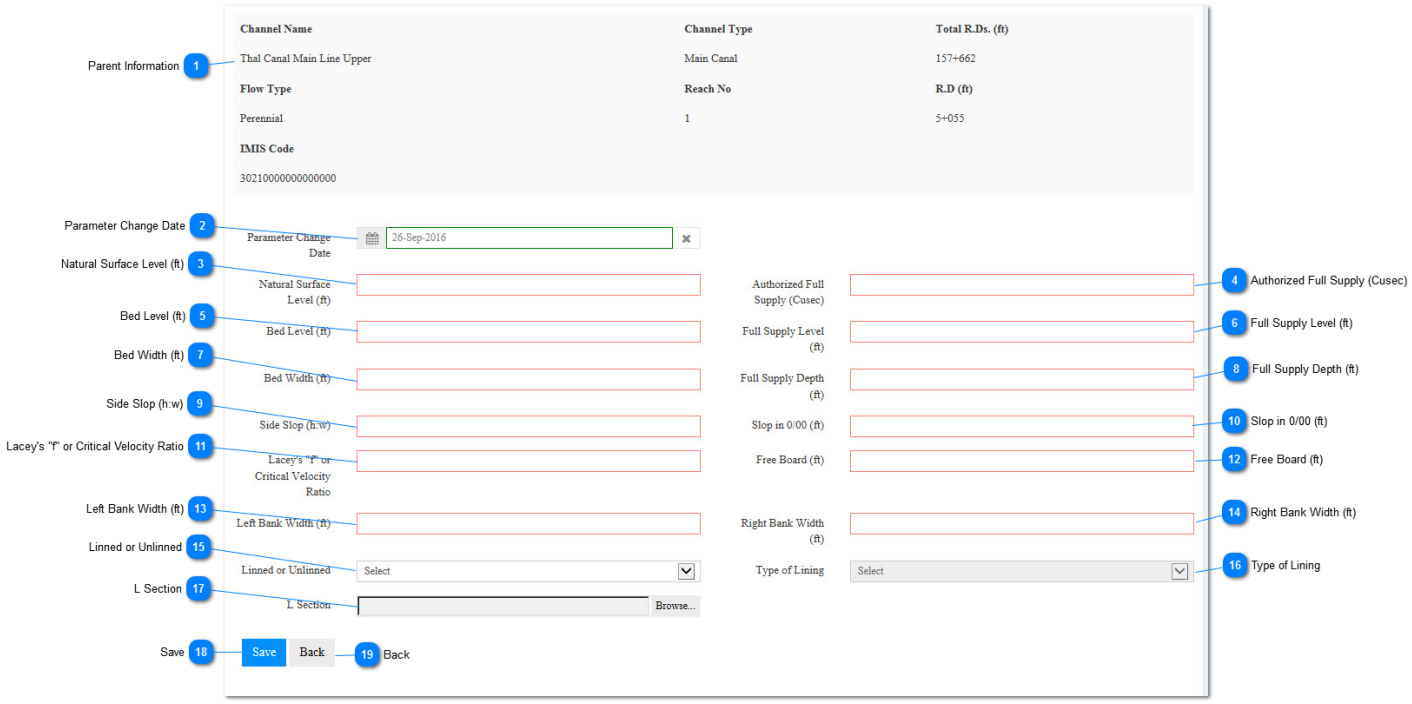
14 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.13 L Section Starting RD

System allows the user to add parameters for L Section Starting RD.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Reaches -> L Section Starting RD



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Reach No**	**R.D (ft)**
Perennial	1	5+055
IMIS Code		
30210000000000000		

- System displays parent information in read only form.

2 Parameter Change Date

- User selects the parameters change date into ‘Parameters Change Date’ calendar dropdown.
- System shows current date by default into calendar dropdown.

3 **Natural Surface Level (ft.)**

- User enters Natural Surface level value into ‘Natural Surface Level’ numeric field.
- Natural Surface Level is mandatory field for adding a new L Section Starting RD.

4 **Authorized Full Supply (Cusec)**

- User enters Authorized Full Supply value into ‘Authorized Full Supply’ numeric field.
- Authorized Full Supply is mandatory field for adding a new L Section Starting RD.

5 **Bed Level (ft.)**

- User enters Bed level value into ‘Bed Level’ numeric field.
- Bed Level is mandatory field for adding a new L Section Starting RD.

6 **Full Supply Level (ft.)**

- User enters Full Supply level value into ‘Full Supply Level’ numeric field.
- Full Supply Level is mandatory field for adding a new L Section Starting RD.

7 **Bed Width (ft.)**

- User enters Bed Width value into ‘Bed Width’ numeric field.
- Bed Width is mandatory field for adding a new L Section Starting RD.

8

Full Supply Depth (ft.)

- User enters Full Supply Depth value into ‘Full Supply Depth’ numeric field.
- Full Supply Depth is mandatory field for adding a new L Section Starting RD.

9

Side Slop (h:w)

- User enters Side Slop value into ‘Side Slop’ numeric field.
- Side Slope is mandatory field for adding a new L Section Starting RD.

10

Slop in 0/00 (ft.)

- User enters Slop in 0/00 value into ‘slop in 0/00’ numeric field.
- Slop in 0/00 is mandatory field for adding a new L Section Starting RD.

11

Lacey's "f" or Critical Velocity Ratio

- User enters Lacey’s “f” or Critical Velocity Ratio value into ‘Lacey’s “f” or Critical Velocity Ratio’ numeric field.
- Lacey’s “f” or Critical Velocity Ratio is mandatory field for adding a new L Section Starting RD.

12

Free Board (ft.)

- User enters Free Board value into ‘Free Board’ numeric field.
- Free Board is mandatory field for adding a new L Section Starting RD.

13

Left Bank Width (ft.)

- User enters Left bank Width value into ‘left bank Width’ numeric field.
- Left Bank Width is mandatory field for adding a new L Section Starting RD.

14

Right Bank Width (ft.)

- User enters Right Bank Width value into ‘Right Bank Width’ numeric field.
- Right Bank Width is mandatory field for adding a new L Section Starting RD.

15

Lined or Unlined

- User enters Lined or unlined value into ‘Lined or Unlined’ numeric field.
- Lined or Unlined is mandatory field for adding a new L Section Starting RD.

16

Type of Lining

- User selects type of lining into ‘Type of Lining’ dropdown.
- Type of Lining is mandatory field for adding a new L Section Starting RD.

17

L Section

- User attaches the images of L section into ‘L Section’ browse path.
- L Section is mandatory field for adding a new L Section Starting RD.

18

Save

- Click on <Save> image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

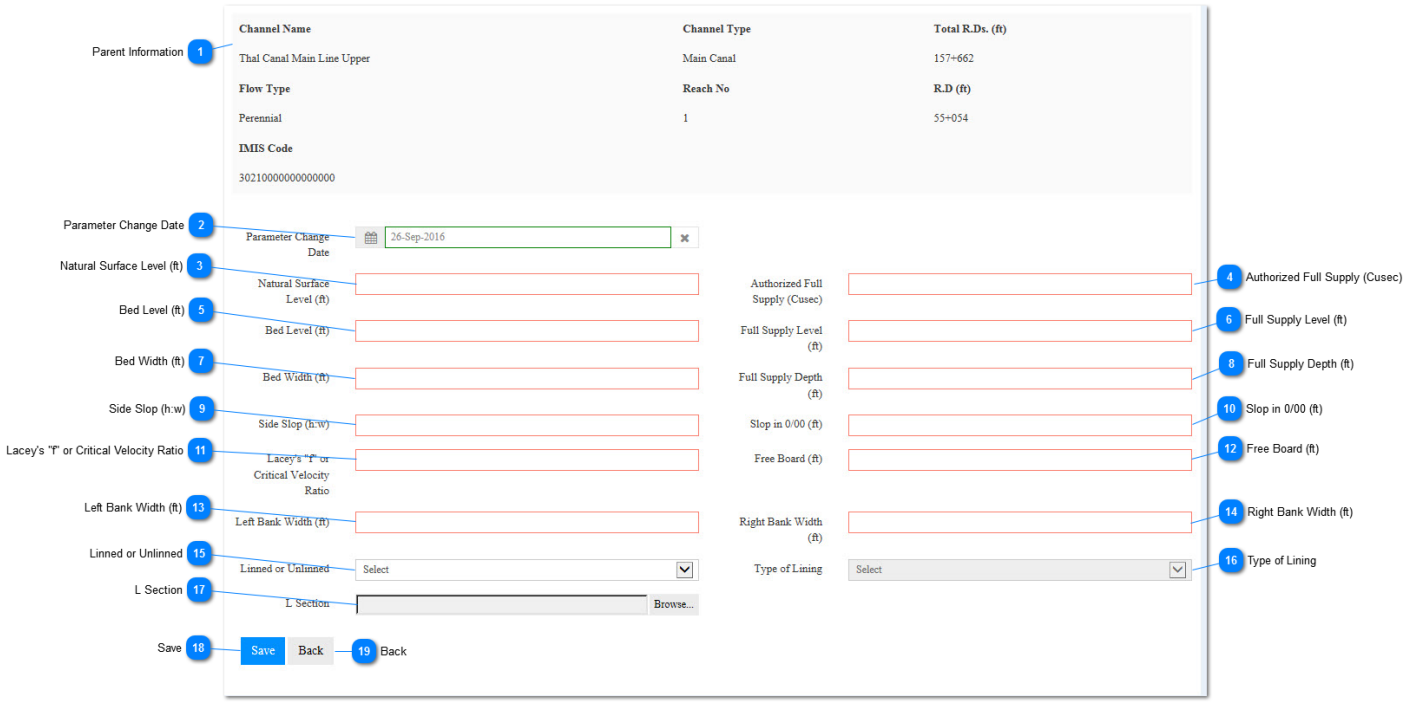
19 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.14 L Section Ending RD

System allows the user to add parameters for L Section Ending RD.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Reaches -> L Section Ending RD



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Reach No**	**R.D (ft)**
Perennial	1	55+054
IMIS Code		
30210000000000000		

- System displays parent information in read only form.

2 Parameter Change Date

- User selects the parameters change date into ‘Parameters Change Date’ calendar dropdown.
- System shows current date by default into calendar dropdown.

3 **Natural Surface Level (ft.)**

- User enters Natural Surface level value into ‘Natural Surface Level’ numeric field.
- Natural Surface Level is mandatory field for adding a new L Section Ending RD.

4 **Authorized Full Supply (Cusec)**

- User enters Authorized Full Supply value into ‘Authorized Full Supply’ numeric field.
- Authorized Full Supply is mandatory field for adding a new L Section Ending RD.

5 **Bed Level (ft.)**

- User enters Bed level value into ‘Bed Level’ numeric field.
- Bed Level is mandatory field for adding a new L Section Ending RD.

6 **Full Supply Level (ft.)**

- User enters Full Supply level value into ‘Full Supply Level’ numeric field.
- Full Supply Level is mandatory field for adding a new L Section Ending RD.

7 **Bed Width (ft.)**

- User enters Bed Width value into ‘Bed Width’ numeric field.
- Bed Width is mandatory field for adding a new L Section Ending RD.

8

Full Supply Depth (ft.)

- User enters Full Supply Depth value into ‘Full Supply Depth’ numeric field.
- Full Supply Depth is mandatory field for adding a new L Section Ending RD.

9

Side Slop (h:w)

- User enters Side Slop value into ‘Side Slop’ numeric field.
- Side Slope is mandatory field for adding a new L Section Ending RD.

10

Slop in 0/00 (ft.)

- User enters Slop in 0/00 value into ‘slop in 0/00’ numeric field.
- Slop in 0/00 is mandatory field for adding a new L Section Ending RD.

11

Lacey's "f" or Critical Velocity Ratio

- User enters Lacey’s “f” or Critical Velocity Ratio value into ‘Lacey’s “f” or Critical Velocity Ratio’ numeric field.
- Lacey’s “f” or Critical Velocity Ratio is mandatory field for adding a new L Section Ending RD.

12

Free Board (ft.)

- User enters Free Board value into ‘Free Board’ numeric field.
- Free Board is mandatory field for adding a new L Section Ending RD.

13

Left Bank Width (ft.)

- User enters Left bank Width value into ‘left bank Width’ numeric field.
- Left Bank Width is mandatory field for adding a new L Section Ending RD.

14

Right Bank Width (ft.)

- User enters Right Bank Width value into ‘Right Bank Width’ numeric field.
- Right Bank Width is mandatory field for adding a new L Section Ending RD.

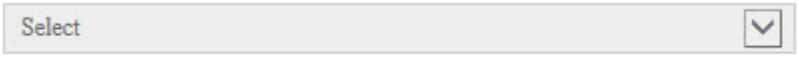
15

Lined or Unlined

- User enters Lined or unlined value into ‘Lined or Unlined’ numeric field.
- Lined or Unlined is mandatory field for adding a new L Section Ending RD.

16

Type of Lining



- User selects type of lining into ‘Type of Lining’ dropdown.
- Type of Lining is mandatory field for adding a new L Section Ending RD.

17

L Section

- User attaches the images of L section into ‘L Section’ browse path.
- L Section is mandatory field for adding a new L Section Ending RD

18

Save

- Click on <Save> image, system verify all the required fields.
- System saves the data into the database & displays a message “Records saved successfully”.
- System display error message if any of the required fields has not been entered.
- System displays newly added record into the Table.

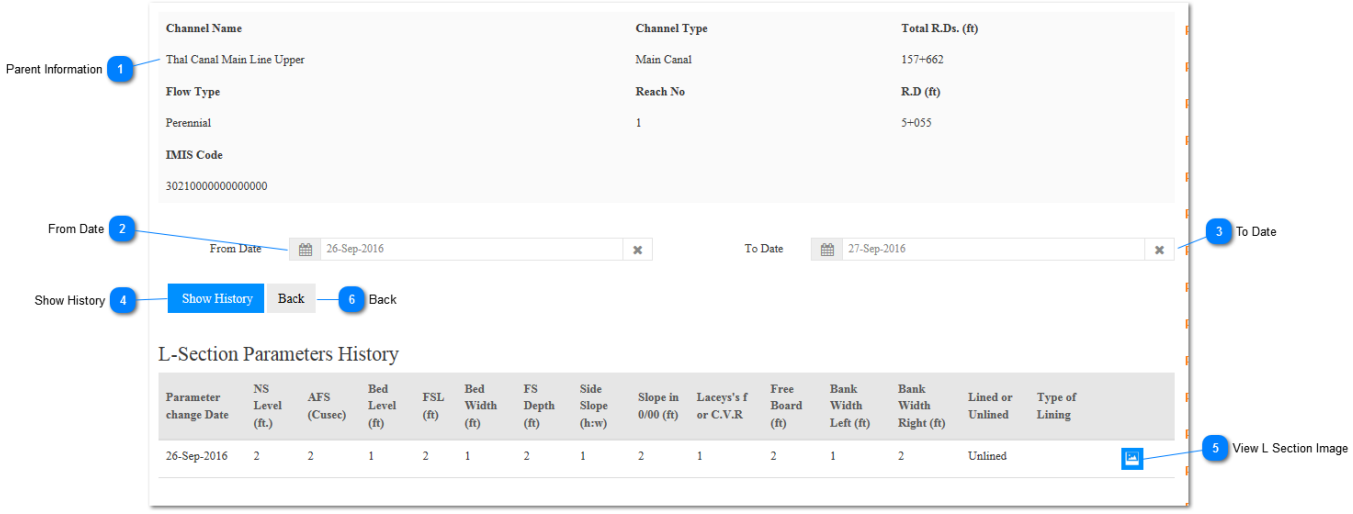
19 **Back**

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.15 L Section History Starting RD

System allows the user to view L Section Starting RD history for that specific reach.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Reaches -> L Section History Starting RD



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Reach No**	**R.D (ft)**
Perennial	1	5+055
IMIS Code		
30210000000000000		

- System displays parent information in read only form.

2 From Date

- User selects the starting date into ‘From Date’ calendar dropdown.
- System shows “1 – current date” into ‘From Date’ calendar dropdown.

3

To Date

- User selects the Ending date into ‘To Date’ calendar dropdown.
- System shows current date into ‘To Date’ calendar dropdown.

4

Show History

- Click on <Show History> button shows the results between the above selected dates.

5

View L Section Image

- Click on ‘View L Section Image’ image displays the image attachment.

6

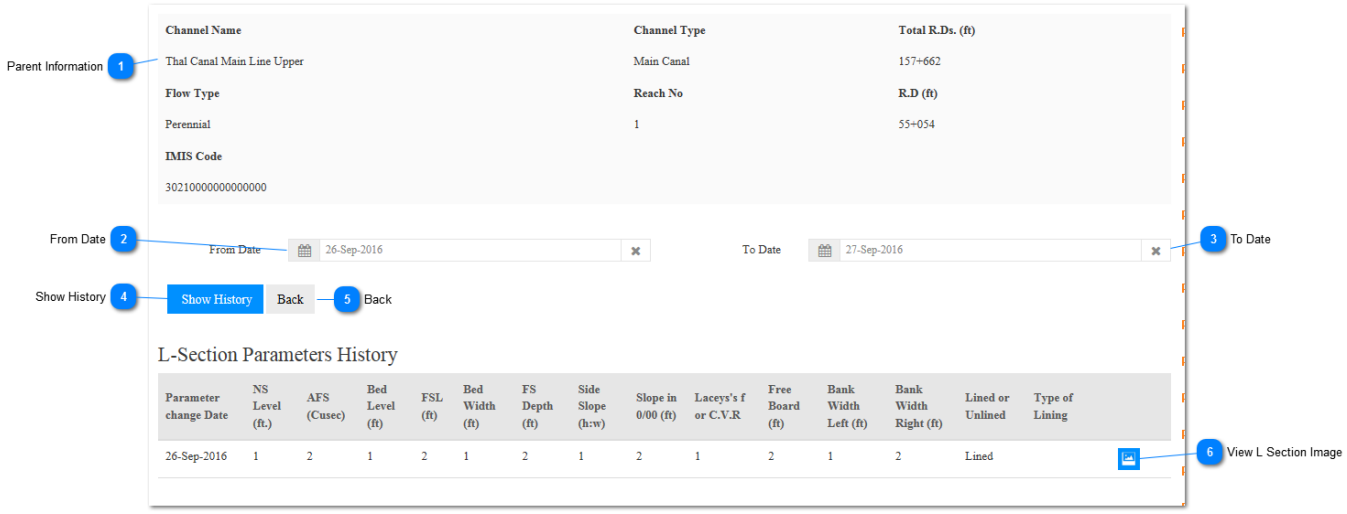
Back

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

2.16 L Section History Ending RD

System allows the user to view L Section Ending RD history for that specific reach.

How to Access: Main Menu -> Irrigation Network - > Channel Data -> Search -> Reaches -> L Section History Ending RD



1 Parent Information

Channel Name	Channel Type	Total R.Ds. (ft)
Thal Canal Main Line Upper	Main Canal	157+662
Flow Type	**Reach No**	**R.D (ft)**
Perennial	1	55+054
IMIS Code		
30210000000000000		

- System displays parent information in read only form.

2 From Date

- User selects the starting date into ‘From Date’ calendar dropdown.
- System shows “1 – current date” into ‘From Date’ calendar dropdown.

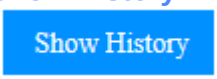
3

To Date

- User selects the ending date into ‘To Date’ calendar dropdown.
- System shows current date into ‘To Date’ calendar dropdown.

4

Show History



- Click on <Show History> button shows the results between the above selected dates.

5

Back

- Click on <Back> button discard all unsaved changes
- System navigates the user to channel search screen.

6

View L Section Image

- Click on ‘View L Section Image’ image displays the image attachment.