COURSE: GROUNDWATER MODELLING USING MODFLOW
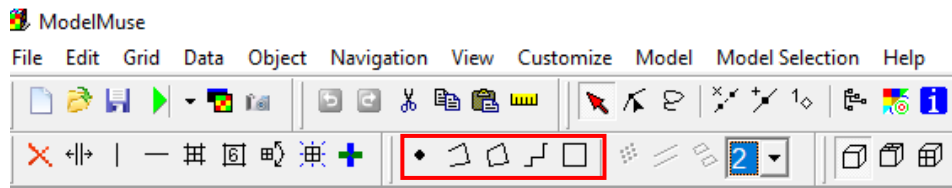
Session 2: Learning the functions of the basic tools found on MODFLOW screen.

Objective:

The objective of this session is learning the functions of the basic tools found in the MODFLOW screen.
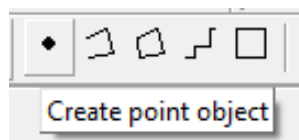
Creating, Selecting and Editing Objects in ModelMuse

ModelMuse have 5 types of objects as Points, Polylines, Polygons, Straight – Lines and Rectangles.
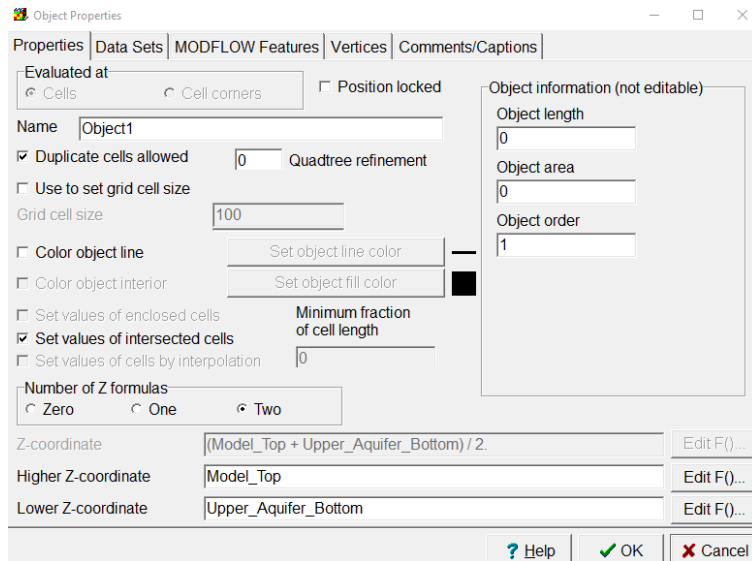

Points Object

To create a point object, the user have two alternatives: go to **Objects / Create / Point** or click on **Create point object** button.
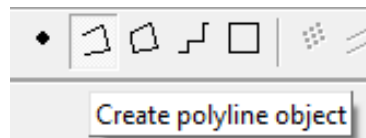

Then will move the cursor to the location on one of the views of the model and click the mouse button. After that a point object will be created and **The Object Properties** dialog box will appear.

The Object Properties dialog box is used to specify the properties of the object. Typical uses for point objects are to define the elevations of the tops or bottoms of geologic units, and to assign point values for hydraulic properties that will be defined using interpolation, well boundary conditions, and head observations.
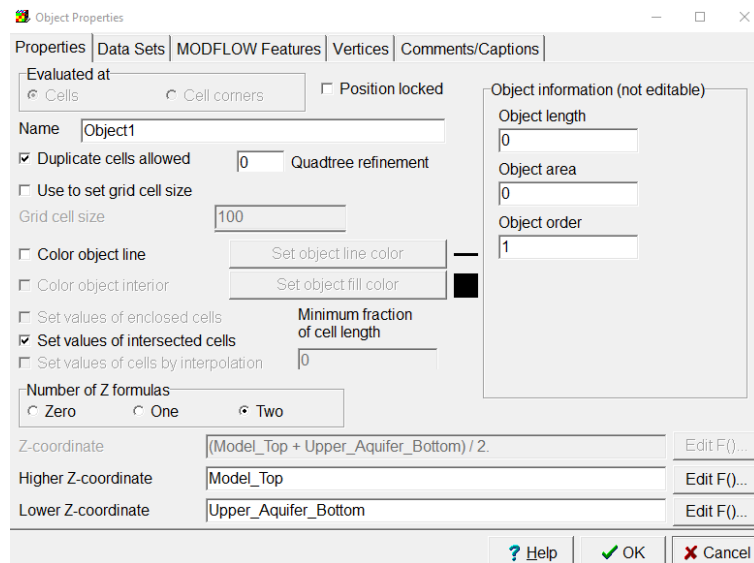
Polylines Object

To create polylines object, the user have two alternatives: go to **Objects / Create / Polylines** or click on **Create polyline object** button.

Then will move the cursor to the location on one of the views of the model where the first vertex of the polyline object is desired. Click the left mouse button. The first vertex of the polyline object will be created at the cursor location.

To create additional vertices, will continue clicking on the same view of the model. When all the desired vertices have been created, double-click at the last vertex or presses the "Enter" key on the keyboard to complete the polyline.
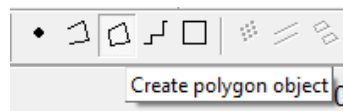
After that a polyline object will be created and **The Object Properties** dialog box will appear.
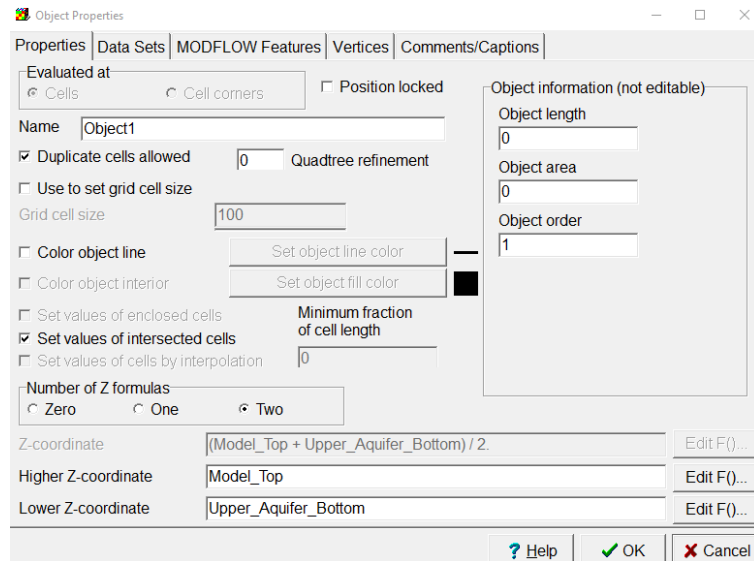
The Object Properties dialog box is used to specify the properties of the object. Typical uses for polylines are to define linear features, such as rivers and boundary conditions at the edges of the model.

Polygons Object

To create polygons object, the user have two alternatives: go to **Objects / Create / Polygons** or click on **Create polygons object** button.


Polygon objects have four or more vertices. The last vertex is always at the same location as the first vertex, so a polygon with four vertices is a triangle. Continues adding vertices as described with Polylines. When the polygon is complete, a final vertex will be added at the location of the first vertex to close the polygon.

After that a polygon object will be created and **The Object Properties** dialog box will appear.

The Object Properties dialog box is used to specify the properties of the object. Typical uses for polygons are to define zones with differing media properties or boundary conditions such as lakes.
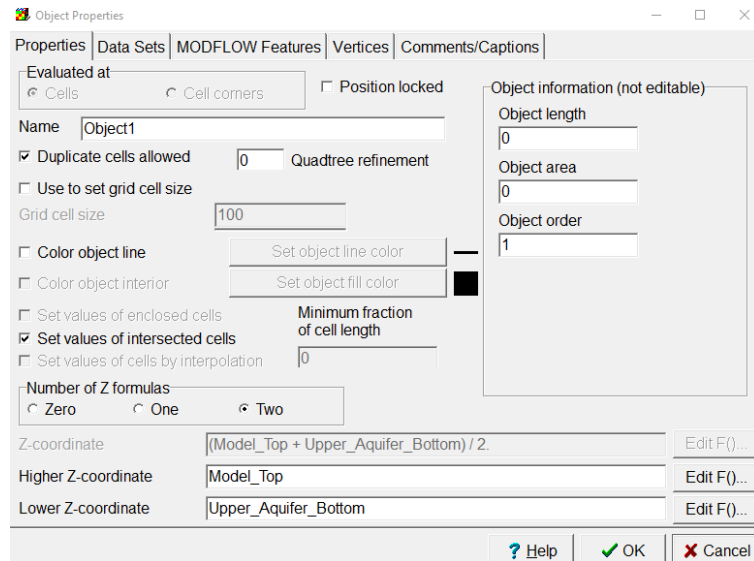
Straight Lines Object

To create polygons object, the user have two alternatives: go to **Objects / Create / Straight Lines** or click on **Create Straight Lines object** button.
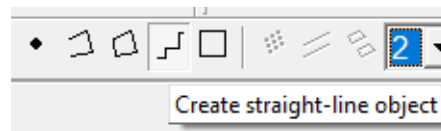
Straight Lines Polygon objects are a special case of polylines in which all the lines segments are parallel to one of the edges of the grid. When the polygon is complete, a final vertex will be added at the location of the first vertex to close the polygon.
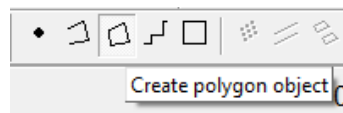
After that a Straight Lines object will be created and **The Object Properties** dialog box will appear.
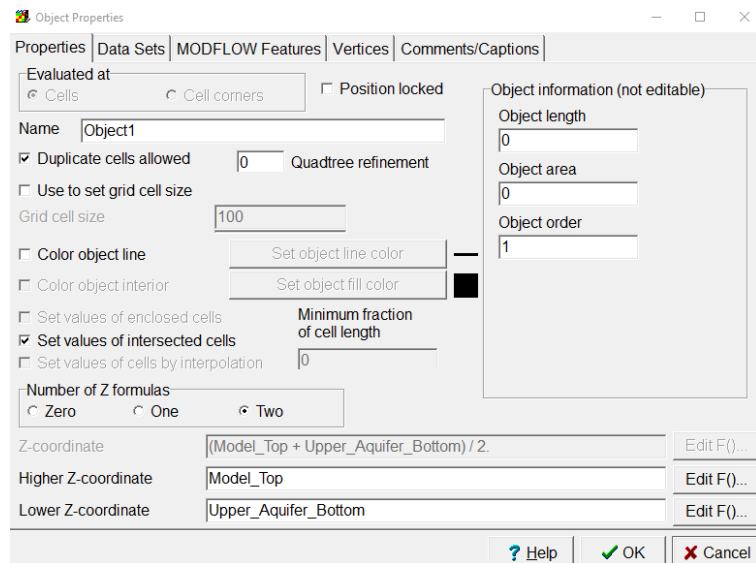
The Object Properties dialog box is used to specify the properties of the object. Typical uses for polygons are to define zones with differing media properties or boundary conditions such as lakes.

Rectangles Object

To create polygons object, the user have two alternatives: go to **Objects / Create / Rectangles** or click on **Create Rectangles object** button.

Polygon objects have four or more vertices. The last vertex is always at the same location as the first vertex, so a polygon with four vertices is a triangle. Continues adding vertices as described with Polylines. When the polygon is complete, a final vertex will be added at the location of the first vertex to close the polygon.

After that a polygon object will be created and **The Object Properties** dialog box will appear.

The Object Properties dialog box is used to specify the properties of the object. Typical uses for polygons are to define zones with differing media properties or boundary conditions such as lakes.