## **Water Resources Engineering**

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#### Delineation of Catchment Boundary

- Valley
- Stream Lines
- Stream Lines
- Valley Lines
- Ridge Lines
- Steps

# **Delineation of Catchment Boundary**

# **Valley**

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### **Stream Lines**

#### Delineation of Catchment Boundary

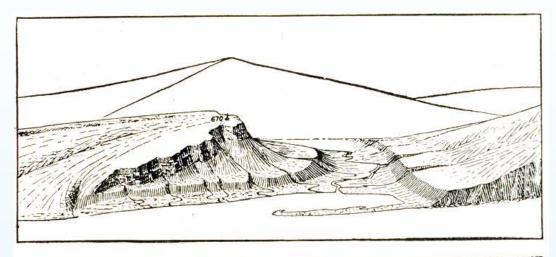
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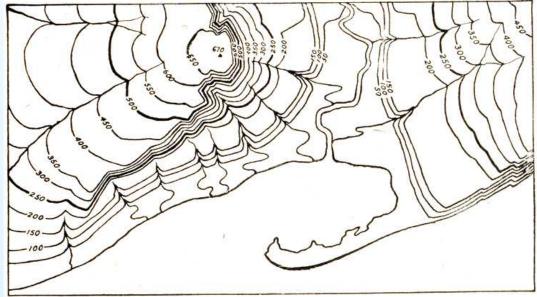


### **Stream Lines**

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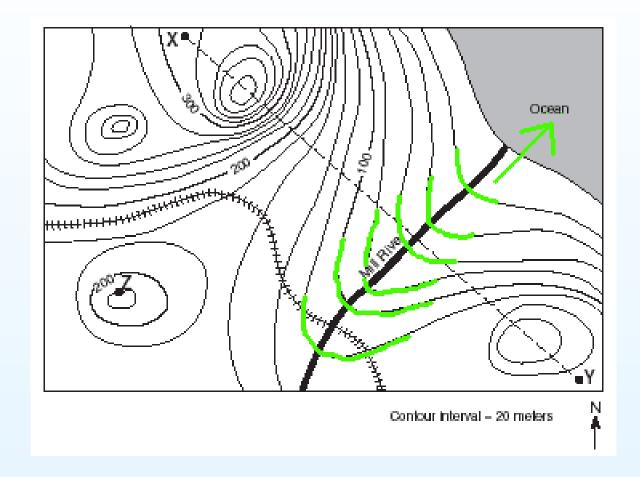




## **Valley Lines**

#### Delineation of Catchment Boundary

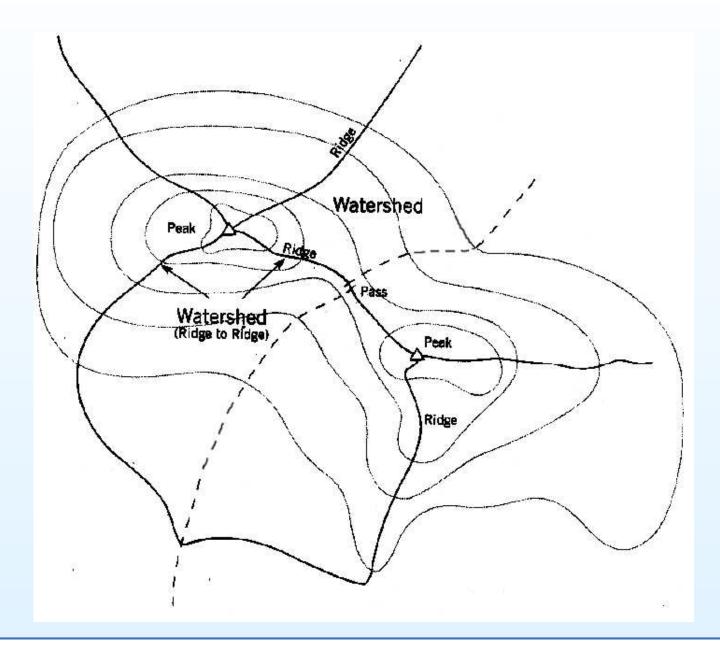
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# **Ridge Lines**

#### Delineation of Catchment Boundary

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### **Steps**

#### Delineation of Catchment Boundary

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- 1. Mark the contour levels.
- 2. Identify all convex upward points and mark them.
- 3. Join the points and draw the valley lines, i.e, the streams.
- 4. Identify ridge lines.
- 5. Make sure no valley line crosses ridge line.
- 6. In case of more than one possible flow paths, take the steepest one.
- 7. Identify the main stream.
- 8. The main stream should pass through the outlet.
- 9. To draw the catchment boundary, start from the outlet. Move along the ridge lines of the rightmost streams. Take the boundary over the beginning of any stream.
- 10. Complete the boundary, come to the outlet and close the path.