

I IMPOUNDING STRUCTURE

- Impounding structure or dam means a man-made device structure, whether a dam across a watercourse or other structure outside a watercourse, used or to be used to retain or store waters or other materials.
- The term includes:
 - (i) all dams that are 25 feet or greater in height and that create an impoundment capacity of 15 acre-feet or greater, and
 - (ii) all dams that are six feet or greater in height and that create an impoundment capacity of 50 acre-feet or greater.

1.1 TYPES OF DAMS

1. Based on Materials of Construction

- Rigid.
- Non-Rigid.

2. Based on Structural Behaviour

- ☐ Gravity Dam.
- ☐ Arch Dam.
- ☐ Buttress Dam.
- ☐ Embankment Dam.

3. Based on Functions

- ☐ Storage Dam.
- ☐ Detention Dam.
- ☐ Diversion Dam.
- ☐ Cofferdam.

4. Based on Hydraulic Behaviour

- ☐ Over Flow Dam.
- ☐ Non Over Flow Dam.

5. General Types

Solid gravity dam (masonry, concrete, steel and timber)

- Arch dams

- Buttress dams
- Earth dams
- Rockfill dams
- Combination of rockfill and earth dams

1.2 FACTORS AFFECTING SELECTION OF DAM

1. Topography.
2. Geological and Foundation Conditions.
3. Availability of Materials.
4. Spillway Size and Location.
5. Earthquake Zone.
6. Height of Dam

