

- 1 – no splitting activities – activity cannot be started, stopped for a period of time then finish later
 - 2 – level of resources used for an activity cannot be changed
 - Risk Assumptions:
 - Activities with most slack pose least risk
 - Reduction of flexibility does not increase risk
 - Nature of activity (easy, complex) doesn't increase risk
 - Time-Constrained projects (smoothing resource demand)
 - Leveling delays noncritical activities by using positive slack to reduce peak demand
 - Advantages:
 - Peak demands reduced
 - Number of resources reduced
 - Fluctuations in demand minimized
 - Disadvantages:
 - Loss of flexibility from reducing slack
 - Increases in the criticality of all activities
 - Use activities with most slack to level resources
 - Resource-Constrained projects (parallel method)
 - Heuristics – allocate resources to activities to minimize project delays
 - Parallel method applies heuristics and prioritizes activities using the following below
 - Activities are leveled using heuristics:
 - 1 – Minimum slack
 - 2 – Least duration
 - 3 – lowest ID number
- The figure consists of three vertically stacked Gantt charts sharing a common horizontal time axis from 0 to 14.

 - Top Chart:** Activity duration bars.
 - Design: 0 to 1 (1 Bh)
 - Layout & scenery: 1 to 3 (2 Bh)
 - Walkways: 3 to 6 (1 Bh)
 - Lighting: 6 to 10 (1 Bh)
 - Irrigation: 4 to 6 (1 Bh)
 - Fence & walls: 4 to 6 (2 Bh)
 - Planting: 6 to 10 (1 Bh)
 - Middle Chart:** Number of backhoes required over time.
 - 0-1: 1
 - 1-3: 2
 - 3-6: 4
 - 6-10: 1
 - 10-14: 0
 - Bottom Chart:** Smoothed number of backhoes required over time.
 - 0-1: 1
 - 1-3: 2
 - 3-6: 2
 - 6-10: 2
 - 10-14: 0

