**Ten Days for Flood Protection**

**Group #: \_\_\_\_\_\_\_\_\_**

**Calculation**

* Cost of protection

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Actions | Lead-time (day) | | | | | | | | | |
| 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Preposition | 1,000 | 1,250 | 1,500 | 1,750 | 2,000 | 2,250 | 2,500 | - | - | - |
| Evacuation | 2,500 | 2,400 | 2,300 | 2,200 | 2,100 | 2,000 | 1,900 | 2,300 | 3,000 | 4,000 |
| Construction | 2,500 | 3,000 | 3,500 | 4,000 | 4,500 | - | - | - | - | - |

* Benefit of protection - Flood damage

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Actions | No flood | 2yr | 10yr | 20yr |  | No flood | 2yr | 10yr | 20yr |
| Preposition | 0 | 3,000 | 3,500 | 4,000 |  | 0 | 4,000 | 7,000 | 12,000 |
| Evacuation | 0 | 1,000 | 3,000 | 5,000 |  |  |  |  |  |
| Construction | 0 | 6,500 | 7,500 | 8,500 |  |  |  |  |  |

**Total = Benefit of protection - Cost of protection - Flood damage**

**Decision table**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Actions | | Lead-time (day) | | | | | | | | | |
| 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Round 1 | Preposition |  |  |  |  |  |  |  | - | - | - |
| Evacuation |  |  |  |  |  |  |  |  |  |  |
| Construction |  |  |  |  |  | - | - | - | - | - |
| Round 2 | Preposition |  |  |  |  |  |  |  | - | - | - |
| Evacuation |  |  |  |  |  |  |  |  |  |  |
| Construction |  |  |  |  |  | - | - | - | - | - |

**Balance table**

Initial purse: 10,000

|  |  |  |
| --- | --- | --- |
| Flood events | Round 1 | Round 2 |
|  |  |
| Total cost |  |  |
| Total benefit |  |  |
| Damage |  |  |
| Balance |  |  |