

```

define OroSepTarg {
    /*case a_X{
        condition wateryear==1922 .and. month<=dec
        value min(1000. + 0.5*max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) }

    case b_X{
        condition always
        value min(1000. + 0.5*swp_allocation_final/tableA_total*max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) */}

    /*case a_20{
        condition always
        value min(1000. + 0.2*max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) */

    case a_X{
        condition wateryear==1922 .and. month<=dec
        value min(1000. + 0.5*max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) }

    case b_X{
        condition always
        value min(1000. + 0.5 * (swp_allocation_final-tableA_loss)/SWP_TableA
                  * max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) }

    /*case a_default{
        condition always
        value min(1000. + 0.5*max(S6(prevSep)-S6_WTS(prevSep) - 1000. - DrainTar_buffer,0.), S6level5) */

    }
}

define OroNextMonTarg {
    value min(OroSepTarg + (max(S6(-1)-S6_WTS(-1) - OroSepTarg,0.)/(Sep-month+1.))*(Sep-month), S6level5)
}

define S6level4 { ! An alternative method
    case JuntoSep {
        condition month >= jun
        value OroNextMonTarg }

    case Other {
        condition always

```

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    value S6level5 }

}

/*
define S6level4 {

    case JunthruJul {
        condition month >= jun .and. month <= jul .and. S6(-1)-S6_WTS(-1) > 2000.0 !.and. S12(-1) < 700.0
        value OroNextMonTarg }

    case Aug {
        condition month == aug .and. S6(-1)-S6_WTS(-1) > 2000.0 .and. S12(-1) < 900.0
        value OroNextMonTarg }

    case Sep {
        condition month >= sep.and. S6(-1)-S6_WTS(-1) > 2000.0 !.and. S12(-1) < 800.0
        value OroNextMonTarg }

    case Other {
        condition always
        value S6level5 }

}

*/
define S6level4dv {alias S6level4 kind 'STORAGE-LEVEL' units 'TAF'}
define OroSepTarget {alias OroSepTarg kind 'STORAGE-LEVEL' units 'TAF'}
define OroPreSepStor {alias S6(prevSep) kind 'STORAGE' units 'TAF'}
define OroNextMonTarget {alias OroNextMonTarg kind 'STORAGE-LEVEL' units 'TAF'}

define S6level3 {value min(2470.,S6level4) }

define OroInf {value (I6)*cfs_taf }
define OroInfEst {sum(i=0,SEP-month,1) (I6(i))*cfs_taf(i) }
define OroDiv {value dem_d6_PWR }
define OroDivEst {sum(i=0,SEP-month,1) dem_d6_PWR(i) }

!define OroSupEst {value max(0.0,OroInfEst - OroDivEst + S6(-1)-S6_WTS(-1) - S6level3(SEP-month))}


```

```
define OroSupEst {value max(0.0,OroInfEst - OroDivEst + S6(-1)-S6_WTS(-1) - S6level3)}
```

```
define OroSupEstdv {alias OroSupEst kind 'FORECAST' units 'TAF'}
```

```
!define OroFlowTarg {value min((OroSupEst/cfs_taf)/(Sep-month+1.),17000.)}
```

```
define OroFlowTarg {value (OroSupEst/cfs_taf)/(Sep-month+1.) }
```

```
define OroRuleCalc {
```

```
    case JunthruSep {
```

```
        condition month >= may .and. month <= sep
```

```
        value   OroInf - OroDiv + S6(-1)-S6_WTS(-1) - OroFlowTarg*cfs_taf }
```

```
    case Other {
```

```
        condition always
```

```
        value   S6level3}}
```

```
define OroRuleCalcdv {alias OroRuleCalc kind 'RULE' units 'TAF'}
```

```
define S6level3adj {value min(max(OroRuleCalc,S6level2),S6level4)}
```

```
define S6level3dv {alias S6level3adj kind 'STORAGE-LEVEL' units 'TAF'}
```

```
goal S6Zone3 {S6_3 < max(S6level3adj - S6level2,0.)}
```

```
goal S6Zone4 {S6_4 < max(S6level4 - S6level3adj,0.)}
```

```
goal S6Zone5 {S6_5 < max(S6level5 - S6level4,0.)}
```

```
goal S6Zone6 {S6_6 < max(S6level6 - S6level5,0.)}
```