

US EPA ARCHIVE DOCUMENT



Minimum Resources for QLP's:

Applicants for QLP status must complete the LOS exercise as part of their application to show that they have considered and can provide the resources necessary to meet the minimum requirements to be a QLP.

The first step in the establishment of the proper level of service is to determine what functions will be provided. (The) Section ... below provides a starting point for the assessment. Annual workloads need to be understood. Historical data provides some of the information but a bottom up analysis is the most effective. An example of the operation and maintenance area is shown below:

- **Inventory** - Determine how much of a typical facility is present. For example, if the stormwater unit has the responsibility for ditch maintenance, the initial starting point would be to measure the number of linear feet of ditch that has to be routinely maintained.
- **Activity** - Related to each feature of the inventory, decide what maintenance activity is needed. This could be mowing, grading and erosion repair etc.
- **Standard** - For each activity, an activity standard is established relating resources (people and equipment) required to perform the maintenance. If we continue on with our example related to ditch mowing, the stormwater unit determines a one-person crew operating a slope mower could serve 2,500 linear feet of ditch per day.
- **Level of Service (LOS)** - The most difficult determination is often deciding what LOS is to be applied to each activity. For our ditch mowing activity, the staff determines that mowing at a frequency of three times per year (on average) is necessary. A logical and informed decision can be made because this is the only variable that is subjective. If the political leadership desires more frequently mowing, the LOS may become four or five times per year. Management may only want to mow two times per year. Once costs are applied to the LOS, then a decision is made.
- **Available Work Days** - How many days can work be performed taking into account vacations, sick leave, holidays, historical weather delays, etc? It is determined that 200 workdays are available each year. (Some local governments report available workdays as low as 160.)
- **Production Requirements** - LOS multiplied by the inventory determines production needs. If the locality has 100,000 linear feet of ditches (the inventory) and the LOS is 3, then the annual production requirement is $100,000 \times 3 = 300,000$ LF/ year.
- **Crew Days** - This is computed by dividing production requirements by the standard: $300,000 / 2,500 = 200$ crew days.
- **Resource Requirements** - The number of crew days/ standard: $200 / 200 = 1$ crew. The standard establishes crew cost; therefore, the cost to provide ditch maintenance at the LOS is the cost of one crew including manpower, equipment, employee benefits, etc.

Coupling the LOS with the facility inventory can create a powerful tool to logically determine the cost of providing the desired service. Even though the example uses a straightforward maintenance activity, it can be applied to virtually any work activity. By performing a service level analysis for each desired work activity and summing them, the total cost to provide



stormwater services for a local government jurisdiction can be determined. Service level analysis is an extremely powerful tool for the stormwater manager.

Level of service analysis can also be applied to the setting of design standards (frequency of allowable flooding, duration and depth), which in turn establishes the cost of a capital improvement program.

(Florida Stormwater Association)

Inventory	200 Permits	200 Permits	200 Permits	200 Permits	200 Permits
Activity	Plan review	swppp review	Inspections	Pre project conference	Project close-out
Standard	1 plan/1.0 days/employee	1 swppp/1.0 days/employee	1 inspec/0.125 days/employee	1 conf/1.0 days/employee	1 closeout/ 2.0 days/employee
Level of Service	1	1	12	1	1
Avail Work Days	200	200	200	200	200
Production Req'ts	200 plans/yr	200 swppp/yr	2400 insp/yr	200	200
Crew Days	200	200	300	200	400
Resource Req'ts	1 employee	1 employee	1.5 employees	1 employee	2 employees

For our purposes, let's use the process above in a program example:

According to this, if you had 200 construction permits per year, and did 1 inspection per month on each project, and the projects lasted a year, you'd need 6.5 employees to provide this scope of services given these standards and these levels of service.

Now using this model, MS4's applying for QLP Status will have to complete the LOS exercise to show the resources necessary for their program to support, at a minimum, the following requirements in their jurisdiction:

MS4s shall implement a construction site stormwater runoff control program. The program must address pollutants in stormwater runoff from construction activities that result in a land disturbance of or equal to or greater than one acre. Reduction of pollutants discharged from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation of, at a minimum:

- 1.
2. Procedures for site inspection and enforcement: The MS4 must have procedures in place for its inspectors to evaluate construction site compliance. The ERP must include specific enforcement steps to ensure construction sites are in compliance with the MS4's program.



2. 3. Recognition of priority construction activity, including at a minimum, those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired or Exceptional Tennessee Waters; Pre-construction meetings with construction-site operators for priority construction activities; and Inspections by the MS4 of priority construction sites at least once per month.
3. 4. Specific procedures for SWPPP review and approval: These procedures must include an evaluation of SWPPP completeness and overall BMP effectiveness.
4. 9. Procedures for managing public input on projects: The MS4 must have mechanisms for providing notice of projects and receiving and considering comments from the public.
5. 10. Procedures for the issuance, tracking and reporting of Notice of Coverage for construction activities performed within the QLP jurisdiction; providing notice of projects and receiving and considering comments from the public.

The QLP application will contain the results of this exercise along with a signature blank for the Mayor (or responsible party) to sign, signifying that he/she is committing that the MS4 guarantees that the resources to support the minimum requirements for QLP Status will be provided.