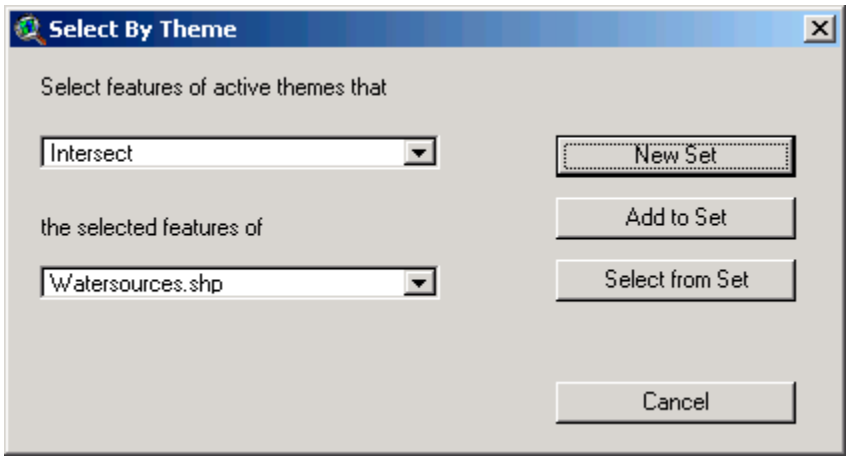
5.7. Fire management plan. In preparation for the development of a fire management plan, the district manager of the Brown Tract is interested in knowing the following:

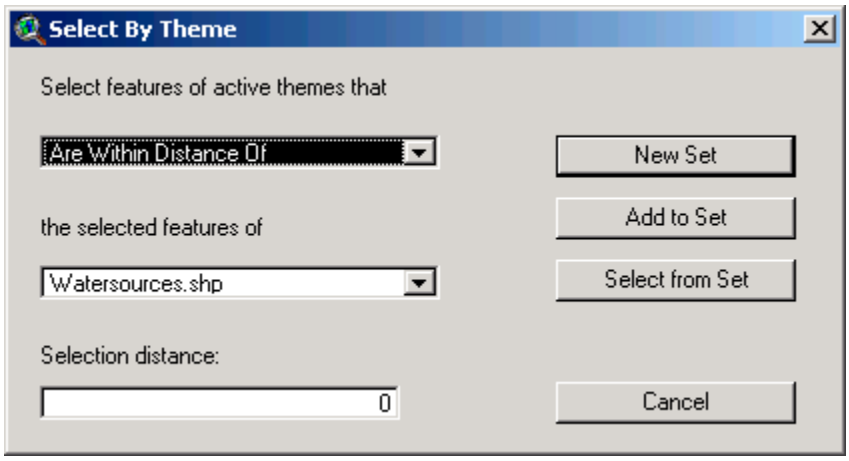
a) How many water sources (all types) are within 100 feet of rocked or paved roads?
b) How many pond water sources are within 100 feet of rocked or paved roads?

Both of these questions suggest that a spatial query is in order. To develop a spatial query, follow the following steps:

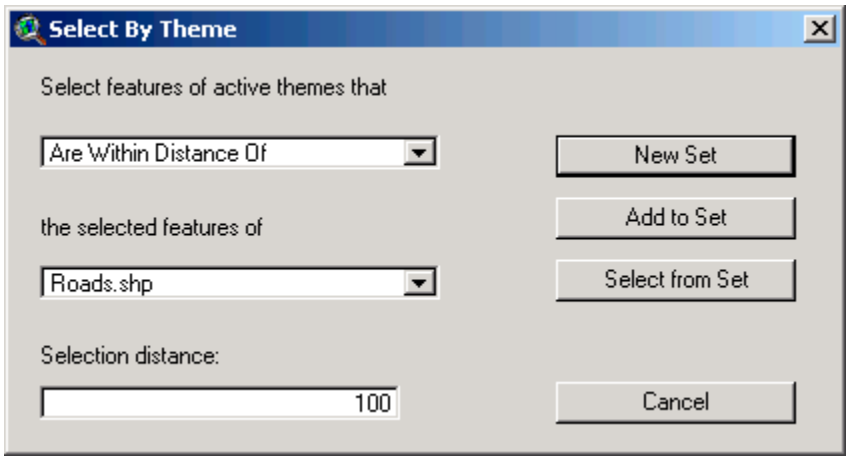
1. Add both the roads GIS database and the watersources GIS database to a View window.
2. Make the roads GIS database the active theme in the View window.
3. Perform a regular query to select the rocked or pave roads:
   Query: ([Surface] = "Rock") or ([Surface] = "Paved")
4. Make the watersources GIS database the active theme in the Table of Contents.
5. Perform a spatial query: From the ArcView Main Menu system, select *Theme*, then *Select by Theme*. A diaolog box should appear similar to the one shown below.



6. In the box that indicates *Select features of active theme that*, choose *Are within distance of*. The diolog box should change to resemble the box shown below.



7. Change the GIS database noted *in the selected features of* box to the roads GIS database, and make sure that the query will still select features that *are within a distance of* the selected roads.
8. The spatial query should now look like the one designed in the box below, where you are interested in knowing which watersources are within 100 feet of the selected features in the roads GIS database (the rock and paved roads).



9. Press *New set* to complete the spatial query.
10. Open the Theme Table related to the watersources GIS database, and you will find 5 watersource features have been selected (answer to part *a*), and that one of these is actually a pond (answer to part *b*)