401 KAR 4:220. Water supply plan requirements.

RELATES TO: KRS Chapter 151
STATUTORY AUTHORITY: KRS 151.110, 151.114, 151.116, 151.118, 151.125

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation is required to implement the legislative mandate of KRS 151.110, 151.114, 151.116, and 151.118, directing the Environmental and Public Protection Cabinet to administer a program for developing a long range water supply plan for each county in the Commonwealth. This administrative regulation describes planning procedures, details to be included in a plan, funding criteria, and uniform data base development.

Section 1. Definitions. The following definitions describe terms used in this administrative regulation. Terms not defined below shall have the meanings given to them in KRS 151.100, or if not so defined, the meanings attributed by common use.

1. "Aquifer" means a saturated, permeable geological unit that is capable of yielding water to wells or springs.
2. "Available water" means water that may be withdrawn by any one (1) user at a specific site, according to the water withdrawal permitting requirements of KRS 151.140 through 151.170 and 401 KAR 4:010.
3. "Base year" means the year that is the starting point for planning conducted pursuant to this administrative regulation, usually the year in which planning begins, and from which existing water use information is drawn.
4. "Contributing watershed" means a watershed delineated in such a way that noncontributing areas, such as areas draining to sinkholes that drain into another watershed, are excluded.
5. "Discharge" means the volume of water that flows past a given point within a given period of time, usually expressed in cubic feet per second or gallons per minute.
6. "Historical year" means a year four (4) to six (6) years prior to the base year.
7. "Hydrologic unit" means watershed boundaries as shown on the U.S. Geological Survey's Hydrologic Unit Map of Kentucky.
8. "Impoundment" means a water-retaining structure with the ability to retain at least twenty-five (25) acre-feet of water at normal pool.
9. "Interconnection" means a linkage between two (2) or more water suppliers that can be used to transfer water from one (1) water supplier to the other.
10. "Kentucky River Authority" means the authority established under KRS 151.700 and 151.710.
11. "Local planning fund contributors" means counties, cities, and water suppliers that pay any portion of the expenditures necessary to comply with this administrative regulation.
12. "Monthly average flow" means the average flow for each month of the year based on the period of record. It is equal to the total volume of water used for the month divided by the number of days in the month.
13. "Nonpoint source pollution" means pollution caused by diffuse sources, including land run-off, precipitation, atmospheric deposition, or percolation.
14. "Phase one planning activities" include the activities required by this administrative regulation that relate to data collection and assessment of water supply planning needs. Specifically, these activities include the requirements for initiating the planning process, including notifications and setting planning objectives, and Section 6(1) through (8) of this administrative regulation.
15. "Phase two planning activities" include the activities required by this administrative regulation that relate to inventorying water resources, protecting water supplier sources, preparing emergency plans, evaluating water supply alternatives, and to all other planning activities not
completed as phase one planning activities.

(16) "Planning council" means a group formed for the express purpose of creating a water supply plan in compliance with this administrative regulation.

(17) "Planning grant" means funds awarded by the General Assembly and the cabinet to support water supply planning pursuant to this administrative regulation.

(18) "Planning representative" means a person who is designated by a planning council to perform tasks in compliance with this administrative regulation.

(19) "Planning unit" means a county or group of counties that have agreed to join with other counties to create a water supply plan that encompasses more than one (1) county.

(20) "Recharge area" means that area that captures and supplies water to a spring or an aquifer.

(21) "Regionalization" means the creation of a regional, administrative or infrastructural, water supplier unit by consolidation or expansion.

(22) "Safe yield" means the amount of water a user can withdraw annually from a groundwater basin throughout the year without depleting the well or aquifer and without adversely affecting other users of the aquifer.

(23) "Semipublic water supplier" means any water supply system that serves more than three (3) families, but is not a water supplier or distributor.

(24) "Seven (7) day, ten (10) year low flow" means the lowest mean flow for seven (7) consecutive days having a recurrence interval of ten (10) years, or having a ten (10) percent chance of occurring in any year.

(25) "Seven (7) day, twenty (20) year low flow" means lowest mean flow for seven (7) consecutive days having a recurrence interval of twenty (20) years, or having a five (5) percent chance of occurring in any year.

(26) "Source classification" means the particular type of a water supply site, including surface water intake, well, or spring-fed intake.

(27) "Specific capacity" means yield of a well per unit of drawdown.

(28) "Unaccounted for water" means water that is withdrawn and not used for commercial, residential, industrial, or municipal purposes.

(29) "Water conservation" means methods and technological applications of passive and active water savings and reuse devices, components and processes to reduce demand for water supply.

(30) "Water supplier" means any system that provides water to the public for human consumption, has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year, and withdraws more than fifty (50) percent of the water it distributes.

(31) "Water supply distributor" means any system that provides water to the public for human consumption, has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year, and depends on a water supplier to provide fifty (50) percent or more of the water it distributes.

(32) "Water supply reservoir" means a water retaining structure with the ability to retain at least thirty (30) days of average water use at normal pool, used by a water supplier.

(33) "Water supply source" means a particular site or classification of site where water is withdrawn.

(34) "Water watch group" means a group registered with the cabinet as part of the water watch program.

(35) "Zone of contribution" means the entire area recharging or contributing to a well or well field.

(36) "Zone of influence" means the spatial area surrounding a well, in which drawdown effects occur from groundwater pumpage.
(37) The following items used in this administrative regulation are defined in KRS 151.100: cabinet; dam; domestic use; groundwater; reservoir; secretary; watershed; and withdrawal of water.

Section 2. Scope and Applicability. Each county, its municipalities and water suppliers, shall prepare a water supply plan. Representatives of each county, its municipalities and water suppliers shall decide whether to form a multicounty planning unit and shall form a planning council to oversee the planning process. Under the oversight of the planning council, a planning representative shall assess the need to provide increased or alternative water supplies for the water supplier systems within each county, formulate recommendations to protect water supplies, and prepare a water supply contamination response plan. If increased or alternative water supplies are needed, the planning representative shall develop water shortage response plans and evaluate water supply alternatives. The planning council shall select water supply alternatives. Until July 15, 1996, the cabinet shall award grants, if budgeted by the General Assembly, for water supply planning.

Section 3. Content and Format of the Planning Documents. The planning representative shall prepare no less than two (2) documents which shall include the information as required by this administrative regulation and additional information as considered necessary by the planning council. The cabinet may accept planning documents that were prepared prior to the existence of a planning council in place of specific sections of the planning documents required by this administrative regulation.

1) Plan formulation document. Documentation of the details of the planning process shall be placed in a publication subtitled "Plan Formulation Document." The plan formulation document shall have sections named and numbered as specified in this subsection.
   (a) Phase one planning activities shall be documented in sections named and numbered as follows: I. Formation of the planning unit; II. Planning council and planning representative; III. Notifications; IV. Workplan and process for setting objectives; V. County base map; VI. Water use and water use forecast; VII. Water supplier source assessment; VIII. Supply adequacy assessment; Appendix PFD-A - Paying for the planning process; Appendix PFD-B - Council minutes.
   (b) Phase two planning activities shall be documented in sections named and numbered as follows: IX. Supply protection; X. Water resources inventory; XI. Water supply alternatives; XII. Primary water supply alternative; XIII. Emergency plans; XIV. Implementation plan; Appendix PFD-A - Paying for the planning process; Appendix PFD-B - Council minutes. If the current supply source is adequate for forecasted demands, plan formulation document sections X, XI, XII, and XIV shall contain a brief statement of adequacy and the consequent lack of need to assemble information for each of those sections.

2) Final plan document. Documentation of the water supply plan shall be placed in a publication subtitled "Final Plan Document." The final plan document shall have sections named and numbered as specified in this subsection.
   (a) Phase one planning activities shall be documented in sections named and numbered as follows: I. Formation of the planning unit; II. Planning council and planning representative; III. Planning objectives and water supply planning conflicts; IV. County base map; V. Water use, forecast, and infrastructure assessment; VI. Water supplier source assessment; VII. Supply adequacy assessment; Appendix FPD-A - Obstacles to the planning process.
   (b) Phase two planning activities shall be documented in sections named and numbered as follows: VIII. Supply protection; IX. Water resources inventory; X. Water supply alternatives; XI. Primary water supply alternative; XII. Emergency plans; XIII. Implementation plan; XIV. Plan approvals; Appendix FPD-A - Obstacles to the planning process. If the current supply source is adequate for forecasted water use, final plan document section X shall contain a brief statement of adequacy and the consequent lack of need to assemble information for that section.
Section 4. Plan Initiation and Cabinet Assistance. (1) Planning unit: geographic area of plan. A county may develop a water supply plan independently or it may enter into a written agreement to join with other counties to form a regional water supply planning unit. A multicounty plan may or may not entail regionalization or interconnection between water supplier systems.

(a) If a county has fewer than seven (7) cities, then the decision to join with other counties shall be supported by a two-thirds (2/3) majority of representatives of water suppliers in the county and each city in the county that is not a water supplier.

(b) If a county has at least seven (7) but no more than ten (10) cities, then the decision to join with other counties shall be supported by a two-thirds (2/3) majority of representatives of water suppliers in the county and representatives of the first, second, third, and fourth class cities in the county that are not water suppliers.

(c) If a county has more than ten (10) cities, then the decision to join with other counties must be supported by a two-thirds (2/3) majority of representatives of water suppliers in the county and representatives of the first, second, and third class cities in the county that are not water suppliers.

(2) Planning council. A planning council shall be formed to oversee the planning process.

(a) Membership requirements. The planning council shall consist, at least, of representatives from the following categories in the planning unit:
   1. Each county judge-executive or mayor of an urban-county government, or his or her authorized representative;
   2. One (1) representative of each water supplier that provides water to persons in the planning unit;
   3. One (1) representative of each water supply distributor serving persons in the planning unit, unless that water supply distributor chooses to be represented by another member of the planning council;
   4. One (1) representative of semipublic water suppliers, appointed by the county judge-executive or mayor of an urban-county government, or one (1) representative from a local health department in the planning unit; and
   5. One (1) representative of each first, second, or third class city that is not a water supplier or distributor, unless that city chooses to be represented by another member of the planning council.
   6. One (1) representative of the fourth class cities that are not water suppliers or water supply distributors, appointed by the county judge/executive.
   7. One (1) representative of fifth and sixth class cities appointed by the county judge/executive.

(b) Membership options. One (1) planning council member may represent more than one (1) entity. At any planning council meeting, a majority of the required members of the planning council, listed in paragraph (a) of this subsection, may also choose to appoint other planning council members. The cabinet may require additional planning council members so that the planning council fully represents the planning unit or if the planning unit has unique social or economic characteristics.

(c) First planning council meeting. The entities listed in paragraph (a) of this subsection shall be notified of the first meeting of the planning council at least two (2) weeks prior to the meeting.

(d) Planning council chair. The planning council chair shall be elected by a majority of the planning council members.

(e) Quorum. The planning council shall determine what constitutes a quorum.

(3) Optional water supply advisory group. A planning council may create one (1) or more water supply advisory groups to assist in the planning process.

(4) Planning representative. The planning council shall select a planning representative who shall be responsible for conducting the water supply planning process and creating water supply plan documents.
(5) Cabinet assistance. At the request of one (1) or more counties on a planning council, the cabinet may award water supply planning grants to a county or planning representative. The cabinet shall provide access to records and data collected by the cabinet, in accordance with the Kentucky Open Records Act. The cabinet shall also make every reasonable effort, as resources allow, to provide special data reports and make staff available for consultation and technical support to planning councils and planning representatives.

(6) Documentation of plan initiation.
(a) Section I of the plan formulation document shall describe how the county (or counties), cities, and water suppliers reached agreement as to the composition of the planning unit. Section II of the plan formulation document shall describe how a planning representative was selected.
(b) Section I of the final plan document shall include a description of the planning unit and a planning unit map that shows planning unit boundaries, county boundaries, hydrologic unit boundaries of watersheds, county seats, and first through fourth class cities. Section II of the final plan document shall include a list of planning council members with their affiliations and identify any designated planning council member who declines to serve on the planning council or any designated planning council member that has not responded to invitations to participate in the planning process. Section II of the final plan document shall identify the planning representative and the individuals who will prepare the plan under the direction of the planning representative. If a county advisory group has been formed, section II of the final plan document shall also list the members of that group.

Section 5. Planning Council Duties and Procedures. After a planning representative has been designated, the planning council shall continue to oversee the planning process. This process shall use principles of hydrologic science, effective environmental protection, efficient water management and conservation, and democratic governance.

(1) Public notice and public participation. The planning council shall solicit public input for planning decisions.
(a) Council meetings. Each meeting of a planning council shall allow time to discuss progress of the planning process and obtain public input. The planning council shall notify local broadcast and print media of the meetings and request that the media make a public announcement of the time, place and purpose of the meeting. The planning council shall keep minutes of its meetings and a list of attendees and other interested persons. These shall be available to the public on request and shall be included as Appendix PFD-B of the plan formulation document.
(b) Public notice shall include the following:
1. A public notice shall be placed in the newspaper of greatest circulation in the area. The public notice shall be at least three (3) column inches in size, and shall be large enough that all information contained therein is easily readable. A copy of each public notice shall be placed in section III of the plan formulation document.
2. A letter shall be mailed to each water watch group in the planning unit. A sample letter and a list of recipients shall be placed in section III of the plan formulation document.
3. Public notice for a public meeting shall include the date, time, and location of the meeting; the mailing address and deadline for providing written comment; the purpose of the meeting; a brief statement of the purpose of the plan and planning procedures; and any other information to ensure that the public is aware of the nature of the meeting and the planning process.
(2) Conflict resolution.
(a) Planning council members shall attempt to reach consensus on planning goals, objectives, and preferred supply, emergency, and implementation alternatives. The planning council may select mediation as a method to achieve an acceptable solution. The cabinet may provide mediation assistance if requested by planning council members.
(b) If planning council members are unable to reach consensus concerning any aspect of the planning process, a description of the conflict shall be included in section III of the final plan document. This section shall also describe conflicts or potential conflicts between the water supply plan and existing plans of local units of government, water suppliers, or water supply distributors and conflicts or potential conflicts between the water supply plan and existing or proposed plans of surrounding counties. Each description of a conflict shall identify the units of government or water suppliers or distributors involved in the conflict. Each description shall also identify the provisions or omissions causing the conflict and the nature of the conflict, including objections and the type of authority applicable.

(3) Notification. The planning council shall comply with the requirements in this subsection within fourteen (14) days of the first meeting of the planning council. If phase two planning activities for any county within the planning unit are begun two (2) years or more after the notifications required by this subsection, the planning council shall repeat the notifications required by this subsection before beginning phase two planning activities. If a water supply plan has been prepared for the county within five (5) years of the base year, the cabinet may allow variances in the notification process.

(a) Notification to adjacent counties. The planning council shall send written notification to mayors, county judge-executives, and water suppliers in counties adjacent to the planning unit of the intent to develop a water supply plan.

(b) Notification to the public. The planning council shall give public notice of the intent to develop a water supply plan. Public notice shall describe the planning unit and planning council membership. Public notice shall state that a water supply plan is being developed, that public attendance at council meetings is welcomed, and that a meeting concerning planning goals and a meeting concerning plan alternatives will be publicly announced. Further, it shall announce the date, time, and location of the next council meeting or provide a telephone number at which such information shall be available.

(c) Notification to local governments and water suppliers. The planning council shall send written notification of the intent to develop a water supply plan to the following: all local units of government within the planning unit; water suppliers that provide water for use in the planning unit; and local units of government that use the same source of water as any water supplier in the planning unit. The letter of notification to local governments and water suppliers shall request the following information:

1. A copy of any existing water or related plans;
2. A statement of any current or potential conflicts, problems or opportunities that the local units or water systems want the planning process to examine or address, including water use rights, access and conservation; and
3. A description of expected changes in or around the planning unit that may alter current growth trends, including existing ordinances and planning goals.

(d) Notification to the cabinet. The planning council shall notify the cabinet of the intent to develop a water supply plan. Notification to the cabinet shall include a list of members of the planning council, their affiliations, and a list of counties included in the planning unit. The notification shall identify any designated planning council member who declines to serve on the planning council or any designated planning council member that has not responded to invitations to participate in the planning process. The notification shall state whether counties in the planning unit will apply for a planning grant from the cabinet. The cabinet shall notify the planning council of data that is readily available from the cabinet, state universities or other state or federal agencies.

(e) Notification to the Kentucky River Authority. If any portion of any county in a planning unit is located within the watershed of the Kentucky River, the planning council shall notify the Kentucky River Authority of the intent to develop a water supply plan. The letter of notification shall ask the
authority to provide information concerning any planning objectives or activities that might impact the water supply planning process of the planning unit.

(f) Documentation of notifications. Section III of the plan formulation document shall include a copy of each public notice and notification sent to adjacent counties and to local units of government and water suppliers, a list of persons to whom these documents were sent, and a description of information received in response to notification sent to local governments and water suppliers. If any portion of any county in a planning unit is located within the watershed of the Kentucky River, section III of the plan formulation document shall include a copy of the notification sent to the Kentucky River Authority and a description of the response from the authority.

(4) Planning goals and objectives.
(a) The planning council shall consider the following objectives for the planning process:
1. Use of conservation to the maximum extent practical;
2. Choice of supply dependability. In addition to the level of water supply that meets minimum standards described in Section 6(8) of this administrative regulation, a planning council may plan to provide a continuous level of supply under all conditions or plan to rely on consumer cooperation to maintain a supply buffer, allowing a supplier to provide less than a continuous level of supply;
3. Compatibility with existing plans, or to offer recommendations to alter those plans;
4. Preservation and use of natural water storage and retention systems, whenever cost and data constraints permit;
5. Protection and enhancement of the overall quality of the environment;
6. Cost effectiveness; and
7. Social and political acceptability, and community cohesion.
(b) The planning council shall assess existing plans and public input regarding planning objectives and existing and forthcoming issues to be addressed in the planning process. The planning council shall identify any planning objectives specific to the planning unit. The planning council shall conduct at least one (1) public meeting to obtain public input concerning objectives and issues affecting the planning process. The planning council shall conduct the public meeting concerning objectives and issues early in the planning process, prior to determining the objectives of the planning process.
(c) Documentation. Section III of the final plan document shall describe the planning objectives and summarize the process used to determine these objectives. Section IV of the plan formulation document shall fully describe the objective-setting process.

(5) Water supply alternatives and emergency response plans. The planning council shall conduct at least one (1) public meeting to obtain public input concerning supply protection recommendations and emergency plans. If the existing sources of supply are not adequate to meet forecasted needs for twenty (20) years after the base year, the public meeting shall be conducted as part of the process for selecting a water supply alternative, to obtain public input concerning plan alternatives, implementation strategies, and any reevaluation of goals and objectives. The planning council shall review water supply plan alternatives and implementation strategies; consider public input, reevaluate goals and objectives; and select alternatives to be included in the final plan document.

(6) Water supply plan document approval. Section XIV of the final plan document shall include the signature of each member of the planning council who has participated in the planning process, signifying that the document accurately reflects the planning effort. If any member disagrees with the chosen plan alternative, it is the responsibility of that member to identify objections in a minority report in Section III of the final plan document, as described in subsection (2) of this section. The cabinet may approve a final plan document that is not signed by each planning council member if the planning council justifies the absence of each missing signature.
(7) Plan implementation.
   (a) Upon completion and acceptance of the plan by the cabinet, the planning council shall act as an oversight or advisory group to plan implementation. The planning council shall reconvene at least annually and update the plan at least every five (5) years. A tentative date and location for reconvening the planning council shall be placed in section XIII of the final plan document.
   (b) If any portion of any county in a planning unit is located within the watershed of the Kentucky River, the planning council shall address the consistency of the plan with administrative regulations promulgated by the Kentucky River Authority and with the Kentucky River Authority's water resource plan at the annual meeting.

Section 6. Responsibilities of the Planning Representative. (1) Workplan. The planning representative shall develop a workplan for council approval and submission to the cabinet. Workplans may be separately developed for phase one and phase two planning activities. The workplan shall define objectives and deadlines for the planning process in accordance with the objectives established by the planning council, KRS 151.110 through 151.116, and this administrative regulation. The rate of plan development for specific counties within multicounty units may vary. A copy of the workplan shall be placed in section IV of the plan formulation document. The workplan shall identify the following:
   (a) The planning representative;
   (b) Overall goals, proposed procedures, and quarterly objectives;
   (c) A planning budget;
   (d) Sources of funds for the planning effort, including in-kind services, if any; and
   (e) Any proposed deviations from the standard procedures required in this section and Sections 3 and 5 of this administrative regulation. Deviations from the standard procedures in this administrative regulation are allowed only with prior approval from the cabinet.

   (2) Information review. The planning representative shall assemble and review information collected through the notification process described in Section 5(3)(c) and (4) of this administrative regulation. The planning representative shall review any plans and studies prepared within five (5) years previous to the base year by city, county, regional, state, and federal agencies that are related to water, sewer, waste management, or commercial and industrial growth. Existing water or water-related plans shall be described in section III of the final plan document.

   (3) Obstacles to the planning process. The planning representative shall describe obstacles to the planning process that affect the potential accuracy, effectiveness, or implementation of the planning effort. These obstacles may include lack of equipment; insufficient legal, fiscal or other resources necessary to implement data collection; inadequate authority or responsibility at any governmental or organizational level; or lack of available information. Appendix FPD-A of the final plan document shall identify and describe obstacles to the planning process, state the relevance of the incomplete or unavailable information to the planning process, and make recommendations to remove the obstacle for future planning efforts.

   (4) County base map.
   (a) The following information shall be located and identified on a map of each county in the planning unit: two (2) tick marks on both the right and left margins and two (2) along both the bottom and the top, each showing latitude and longitude; county boundary; state, federal, and significant county roads; hydrologic unit boundaries of watersheds; rivers, creeks, and other tributaries within the county or shared with contiguous counties; county seat; names and jurisdictional boundaries of first through fourth class cities; significant springs; water supply reservoirs; and dams. Maps of counties that have less than ten (10) fifth class cities shall show the name and location of these cities.
   (b) County base maps shall be used as a base for each map required in this administrative
regulation, with the exception of the planning unit map and maps generated by state or federal agencies, or as specifically approved by the cabinet. The scale of county base maps and maps created using the county base map shall be between 1:24,000 and 1:90,000. The map document from which county base maps are compiled shall originally be a map at a scale of 1:90,000 or larger. Scales for county base maps in a planning unit shall be identical. Maps required in this administrative regulation may be created as overlays to county base maps. The plan formulation document and the final plan document may include reduced copies of maps in addition to the maps created at the scale required in this paragraph.

(c) The county base map shall be placed in section V of the plan formulation document and section IV of the final plan document.

(5) Water use assessment. The planning representative shall assess water use for the base year. The planning representative shall use sources of data specified in this subsection unless the planning representative establishes that other information is more accurate or that the required information is not available. If a comprehensive water supply study has been completed within five (5) years of the base year by the U.S. Army Corps of Engineers for any area of the planning unit, the planning representative shall use the information developed in those studies, with corrections if data varies significantly from the latest U.S. census. Information developed in other water supply studies that have been completed within five (5) years of the base year may also be used, with corrections based on the latest U.S. census data, with the approval of the cabinet.

(a) Water suppliers and distributors.
   1. Amounts of water used by water suppliers and distributors shall be determined for the base year. Usage shall be entered into a computerized database, using software described in subsection (7)(a) of this section. Water supplier and distributor usage shall also be determined for a historical year, four (4) to six (6) years prior to the base year. This information shall be used to calibrate the forecasting software output. Usage data shall be disaggregated by usage sector.
   2. Amounts of water used by water suppliers shall be determined from reports of metered water withdrawals, unless the planning representative justifies to the cabinet the use of other figures.
   3. Amounts of water used by water supply distributors shall be determined from meter readings.
   4. Water losses shall be calculated from the difference between metered readings of water purchased or withdrawn and water sold or otherwise accounted for.
   5. Population figures used shall be based on the latest U.S. census and projections made by the Urban Research Institute at the University of Louisville. These figures may be adjusted for the planning unit, with cabinet approval, if the planning representative justifies the need to do so.

(b) Water use for withdrawal permittees other than water suppliers or distributors shall be determined from water withdrawal permit records available from the cabinet. Water withdrawals in violation of the water withdrawal permitting program shall also be determined.

(c) Agricultural water use from each water source shall be estimated.

(d) Other permit-exempt water withdrawals, including water used for fire protection at rates less than 10,000 gallons per day and for domestic uses, shall be estimated. Permit-exempt water withdrawals shall be described by source classification and usage.

(e) Documentation of water use assessment. Written records shall be kept regarding the sources of any water use data. The sources of data and water use information compiled pursuant to this subsection shall be fully described in section VI of the plan formulation document and summarized in section V of the final plan document, unless otherwise specified.

1. The planning representative shall create a water use map of each county in the planning unit. The water use map shall identify water supplier intakes, water supplier wells, and permitted water withdrawal intakes or wells that do not serve water suppliers. The map shall identify the source type and use category of each permitted site. The map shall also show water withdrawal sites for entities that withdraw more than 10,000 gallons of water per day and are exempt from or
in violation of the water withdrawal permitting requirements of KRS 151.140 through 151.170 and 401 KAR 4:010, and identify the source classification and use category of each permit-exempt user.

2. The planning representative shall create one (1) or more diagrams showing disaggregated use of water that was withdrawn by each water supplier, including the categories of domestic, industrial, commercial, municipal, and lost or unaccounted for water use during the base year. Disaggregated demand figures shall be listed with respect to the source of supply, unless these sources are interconnected.

3. The planning representative shall describe water use conflicts or potential conflicts, including those caused by groundwater pumping that affects other wells or surface water or by other existing or potential competing users.

(6) Water supplier source assessment.
   (a) Data collection constraints. The planning representative shall forecast the amount of available water, under normal and drought conditions, from each source being used by water suppliers in the planning unit during the base year. Methods for measuring water supply yield shall be pre-approved or specified by the cabinet. The cabinet may approve deviations from the requirements in this subsection, if the planning representative demonstrates significant fiscal or other constraints. If a measure of available water is not accessible to each water supplier on a monthly basis, the planning representative shall estimate the cost of attaining those measurements. Data collection constraints shall be described in Appendix FPD-A of the final plan document.

   (b) The planning representative shall summarize the soils and geologic characteristics of the planning unit. The planning representative shall obtain one (1) or more maps showing general characteristics of soils in the planning unit. These shall be included, as attachments if necessary, in section X of the plan formulation document.

   (c) The planning representative shall calculate the amount of available water at the site of any water supplier intake on a stream. To determine water availability under normal conditions, the planning representative shall apply water withdrawal permitting program criteria to calculated average flow during the month of lowest flow and the seven (7) day, ten (10) year low flow. To simulate drought conditions, the planning representative shall calculate the seven (7) day, twenty (20) year low flow during the month of lowest flow. Data from the U.S. Geological Survey shall be used to make flow calculations unless the planning representative shows the cabinet that other data will provide more accurate information. If the watershed of the intake site extends beyond contiguous counties, the planning representative shall delineate an area as a recommended area appropriate for watershed protection.

   (d) The planning representative shall calculate the available amount of water at the site of any water supplier intake in a water supply reservoir during normal and drought conditions. The planning representative shall also calculate streamflow into each water supply reservoir that stores runoff from a contributing watershed that drains more than thirty (30) square miles. Streamflow calculations shall be made as described in paragraph (c) of this subsection. If the watershed of the intake site extends beyond contiguous counties, the planning representative shall delineate an area as a recommended area appropriate for watershed protection.

   (e) The planning representative shall calculate safe yield, specific capacity, zone of contribution and zone of influence for each water supplier well. The planning representative shall delineate an area as a recommended area appropriate for wellhead protection.

   (f) The planning representative shall calculate available amount of water at the site of any water supplier intake at or below a spring. Flow calculations shall be made as described in paragraph (c) of this subsection. The planning representative shall delineate a recharge protection area that includes the recharge area of the spring.

   (g) Documentation of source assessment. The planning representative shall prepare a water
supplier source map of each county in the planning unit. The source map shall show contributing watersheds and known recharge areas for each water supplier’s source of water, such as known zone of influence for a well and recharge area for a spring. The water supplier source map shall also show recommended protection areas. Section VII of the plan formulation document shall show all calculations made pursuant to this subsection. Section VI of the final plan document shall include a chart showing the available yield of streams, reservoirs, springs, and water wells used by water suppliers. If the planning representative identifies constraints on water use related to quality or quantity, these shall be discussed in section VI of the final plan document.

(7) Water use forecast and assessment of treatment and total distribution capacity. Water supply demands shall be forecast for dates five (5), ten (10), fifteen (15) and twenty (20) years after the base year. The planning representative may develop as many as three (3) water use forecasts, each one related to variations in usage rates created by regulatory and nonregulatory measures to reduce the amount of water created by specific water uses. If a comprehensive water supply study has been completed by the U.S. Army Corps of Engineers within five (5) years of the base year for any area of the planning unit, the planning representative shall use the information developed in those studies, with corrections if data vary significantly from the latest U.S. census. Information developed in other water supply studies that have been completed within five (5) years of the base year may also be used, with corrections based on the latest U.S. census data, with the approval of the cabinet.

(a) Water suppliers.

1. Demand for water from water suppliers shall be forecast using computerized software that enable water use projections that are disaggregated according to type of usage, including type of residential unit. Planning representatives may use IWR-MAIN Water Use Forecasting System computer software produced by the U.S. Army Corps of Engineers Institute for Water Resources or similar software. Section VI of the plan formulation document shall include a listing of assumptions, data sources, and extrapolations used in forecasting water demand.

2. The planning representative shall identify and contact any single user that purchases twenty (20) percent or more of the water produced by any water supplier and review all available plans such users have that would affect future water use. These users, their plans and the impact of these plans on forecasted water use shall be summarized in section V of the final plan document.

(b) The planning representative shall forecast average daily water use for each type of water use described in subsection (5) of this section. Diagrams showing disaggregated, forecasted use of water shall be placed in section V of the final plan document.

(c) Assessment of treatment and total distribution capacity. Information related to assessment of treatment and total distribution capacity shall be placed in section V of the final plan document.

1. The planning representative shall determine existing treatment and total distribution capacity of the water supplier. The planning representative shall create one (1) or more graphs comparing treatment and total distribution capacity, any planned expansion of treatment or total distribution capacity, and forecasted water use.

2. The planning representative shall determine if vertical elevation of an intake or capacity of a pump limits access to available water and describe access limitations.

3. For water suppliers whose water losses are greater than fifteen (15) percent, the planning representative shall estimate the cost of finding and repairing leaks. If water use is not metered, the planning representative shall estimate the cost of meter installation.

4. The planning representative shall prepare a service area map of each county in the planning unit showing the existing jurisdictional and service area boundaries of water suppliers and distributors.

5. The planning representative shall create a service area expansion map for each county in the planning unit showing existing expansion plans of water suppliers and distributors, including
the proposed access sites of new sources of water. The service area expansion map shall be accompanied by an explanation that identifies projected dates of the expansions.

(8) Supply adequacy assessment. In order to determine water supply adequacy, the planning representative shall compare water source availability and water demands for the base year and forecasted demand for dates five (5), ten (10), fifteen (15), and twenty (20) years afterward, for each water supplier or source. By applying adequacy standards described in this subsection to each five (5) year increment, the planning representative shall identify the apparent date at which the current supply will no longer be adequate. Criteria described in this subsection shall be adjusted if a water supplier withdraws water from more than one (1) source of water. The cabinet may approve equivalent adequacy standards if the planning representative demonstrates the necessity to do so. Calculations for determining supply adequacy and a description of supply adequacy shall be documented in section VIII of the plan formulation document and summarized in section VII of the final plan document. If the existing source of supply is not adequate to meet forecasted needs for twenty (20) years after the base year, the planning representative shall inventory the water resources of the planning unit according to subsection (10) of this section. If the existing source of supply is adequate to meet forecasted needs for twenty (20) years from the base year, the planning representative shall evaluate and describe the security of access to supply for that period in section IX of the final plan document. Whether existing supply is adequate for twenty (20) years from the base year or not, the planning representative shall identify potential sources of water to use in case of contamination or similar emergency as described in subsection (13)(b) of this section.

(a) A stream shall be considered an inadequate source of water supply if the seven (7) day, ten (10) year low flow equals zero or if average rate of water use is more than eighty-five (85) percent of the available water under normal conditions.

(b) A water supply reservoir that stores runoff from a contributing watershed area of ten (10) square miles or less shall be considered an inadequate source of supply if the available volume at normal pool provides less than 200 days of supply at the average rate of water use.

(c) A water supply reservoir that stores runoff from a contributing watershed that drains between ten (10) and thirty (30) square miles shall be considered inadequate if the available volume at normal pool provides less than 100 days of supply at the average rate of water use.

(d) The following chart shall be used to determine the adequacy of a water supply reservoir that stores runoff from a contributing watershed that drains more than thirty (30) square miles.

<table>
<thead>
<tr>
<th>Days²</th>
<th>Percent of Water Used¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;45</td>
<td>inadequate</td>
</tr>
<tr>
<td>45 - 60</td>
<td>inadequate</td>
</tr>
<tr>
<td>61 - 100</td>
<td>inadequate</td>
</tr>
</tbody>
</table>

¹"Percent of water used" means average rate of water use divided by the amount of available water in the inflowing stream under normal conditions, times 100.

²"Days" means days of supply at the average rate of water use, stored in the water supply reservoir.

(e) A water supply well or well field shall be considered inadequate if the average rate of water use requires water withdrawal at a rate greater than the safe yield of the aquifer.

(f) A water supply spring shall be considered inadequate if the average rate of water use is more than eighty-five (85) percent of the available water under normal conditions.
(g) In addition to the minimum standards in this subsection, the assessment of supply adequacy shall consider the following:
1. Instream uses such as recreation and maintenance of both game and nongame aquatic life;
2. Water conservation and demand management practices for resolving any adequacy deficits;
3. The quantity impacts of significant water withdrawals in the watershed or recharge area of the water supplier source;
4. The downstream or down-gradient impacts of water supplier withdrawals on other users; and
5. Competing uses of the surface waters or aquifers from which each water supplier's water is being taken.

(9) Supply protection. The planning representative shall identify and evaluate the risk of water supply degradation, contamination, or depletion resulting from activities in the watershed or recharge area in the planning unit. The risk of water supply degradation, contamination, or depletion shall be documented in section IX of the plan formulation document and summarized in section VIII of the final plan document.

(a) The planning representative shall identify any potential source of contamination within the watershed of a surface water supplier source or within the recharge area of a water supplier spring, or the wellhead protection area of a water supplier well or well field. The planning representative shall develop a tabular display of the degree of hazard posed by potential contaminants of a water supplier source. The planning representative shall create a map of potential sources of contamination. The map and the tabular display shall be placed in section VIII of the final plan document. Sources of potential contamination shall include, at a minimum:
1. Areas possessing known or potential sources of nonpoint source pollution;
2. Discharges permitted or tank batteries registered under 401 KAR 5:050 through 401 KAR 5:090;
3. Landfills, hazardous waste sites, and large, unpermitted or abandoned garbage dumps;
4. Active or inactive underground storage tank facilities that are registered with the Division of Waste Management;
5. Wells used for underground injection;
6. Facilities that store, utilize, or produce hazardous materials; and
7. Lagoon or surface impoundments or stock piles used to store or produce materials which could potentially contaminate water.

(b) The planning representative shall relate soils and geologic characteristics of the planning unit to the risks of water supply contamination, degradation, or depletion in section VIII of the final plan document.

(c) The planning representative shall describe local, existing regulatory and nonregulatory measures that protect the quality and quantity of the water supplier's sources in the planning unit in section VIII of the final plan document. Copies of local, existing regulatory measures shall be included in section IX of the plan formulation document.

(d) The planning representative shall formulate recommendations for local regulatory and nonregulatory measures to protect the quality and quantity of the water supplier's sources through watershed, recharge area, or wellhead protection programs. Local regulations and recommendations shall be described in section VIII of the final plan document.

(10) Water resources inventory. If the existing source of supply is not adequate to meet forecasted needs for twenty (20) years after the base year, the planning representative shall inventory the water resources of the planning unit. If inadequate, existing sources affect less than forty (40) percent of the counties in the planning unit, the cabinet may require an inventory or specific counties only.

(a) The planning representative shall prepare one (1) or more water resources maps of each county in the planning unit. Water resources maps shall be placed in section IX of the final plan document.
document. Maps produced by federal or state agencies may be substituted for one (1) or more features and appended to section IX of the final plan document. Water resources maps shall show the following features:

1. The location of federally authorized or other significant rain and streamflow gauges;
2. Wetlands delineated by the U.S. Fish and Wildlife Service, under the National Wetlands Inventory program, and hydric soils delineated by the U.S. Soil Conservation Service;
3. Outstanding resource waters and coldwater aquatic habitat, as designated under 401 KAR 5:026 through 401 KAR 5:031, Kentucky water quality standards;
4. Generalized land use;
5. Active and abandoned mine works in which water is stored or from which water is discharged, if map information is available;
6. Geologic conditions, such as karst areas, that may cause unique water quantity or quality problems, if this information is available;
7. Areas of cultural and/or archeological significance that may affect water resources of the planning unit;
8. Aquifers and groundwater recharge and discharge areas, if maps are available; and
9. Significant water-oriented recreational resources.

(b) The following information, if available, shall be compiled in paragraph or chart form, and placed in section X of the plan formulation document:

1. Historical streamflow data;
2. Average monthly precipitation from historical data;
3. State and federal requirements and policies affecting water availability;
4. Construction data, usage data and average monthly static water levels, where readily available, of wells used at average rates of more than 10,000 gallons per day;
5. Generalized quality of water;
6. Description of groundwater aquifers, including confining layers, flow characteristics, and predicted maximum yield; and
7. Ownership of dams or water body access rights to any reservoirs or impoundments.

(c) The planning representative shall acquire current U.S. Geological Survey topographic maps of the planning unit, scale 1:24,000, and append these to section IX of the final plan document.

(d) The planning representative shall assemble or identify all readily available printed information related to water resources in the planning unit and describe this information in section X of the plan formulation document.

(e) The planning representative shall place a summary of the available information that relates to the quality of water in the county in section IX of the final plan document.

11) Water supply alternatives. If the existing sources of supply are not adequate to meet forecasted needs for twenty (20) years after the base year, the planning representative shall evaluate water supply alternatives related to each water supplier that does not have adequate supply. These evaluations shall be fully documented in section XI of the plan formulation document, summarized in section X of the final plan document, and presented to the planning council. Maps shall be used if their existence will clarify alternatives.

(a) The planning representative shall examine each alternative that could potentially provide adequate water for normal supply provisions. The planning representative shall clarify these alternatives for the planning council and the public, shall fully explain each alternative in the plan formulation document, and shall summarize each alternative in the final plan document. The planning representative shall clarify why other alternatives were deemed inadequate. Documentation and presentations to the planning council and the public shall clarify at least the factors listed below:

1. The degree to which the alternative contributes to the planning objectives;
2. Use of conservation and demand options, including legal, motivational, and technological water use efficiency measures;
3. The level of supply dependability;
4. Consistency with existing plans;
5. Environmental impacts;
6. The feasibility of providing adequate pumpage and pressure to supply water from the alternative sources;
7. Costs associated with developing the alternative source;
8. Social, political, and economic impacts;
9. Potential sources of contamination of new sources of water;
10. Variations of water quality treatment capabilities or techniques required due to the characteristics of new sources of water;
11. The impacts and potential for conflicts with water uses that are not dependent on water suppliers, including private drinking water wells;
12. Supply protection; and
13. Changes in wastewater treatment and disposal systems required as a result of water supplier system expansion.

(b) If regionalization is considered a feasible alternative, the planning representative shall identify and evaluate the factors related to supply dependability, contamination and other risks, a recommended management structure for the regional unit, and economic cost to individuals, water suppliers, and governments.

(c) If interconnection between existing water suppliers is a specified alternative, the plan shall provide reasonable assurance that the resulting demand for water is included in any water use forecast performed in conjunction with water supply planning for the proposed interconnected water supply system.

(d) If capital improvement projects are proposed to implement the plan, the projects shall be described in the plan, including: design components; storage capacity; location alternatives; proposed construction schedule; expected federal, state and local costs; types of financing; and sources of local financing (subcounty, countywide, or multicounty).

(e) If any portion of any county in a planning unit is located within the watershed of the Kentucky River, the planning representative shall identify administrative regulations promulgated by the Kentucky River Authority and portions of the Kentucky River Authority's water resource plan that are relevant to the planning unit.

(12) Primary alternatives. If any existing source of supply is not adequate to meet forecasted needs for twenty (20) years after the base year, the planning representative shall further evaluate one (1) or more specific alternative if the planning grant or other funds allow. Section XI of the final plan document shall include a detailed description of the selected alternative. A map shall be created if it will clarify the primary alternative or alternatives.

(13) Emergency plans. The planning representative shall prepare water shortage response and supply contamination plans, which shall be documented in section XIII of the plan formulation document and summarized in section XII of the final plan document.

(a) Water shortage response plans. If the water supply availability inventory indicates that water availability for any supplier will be less than adequate during drought conditions, the planning representative shall outline contingency plans for managing water demands and accessing alternate sources of water.

1. Water shortage response plans shall be based on the water shortage response plan available from the cabinet, and shall include: identification of various levels of response; triggers that shall initiate these responses; actions and responses applicable to local government and the public for each response level; and penalties as necessary to ensure that the required actions are im-
2. Water shortage response plans shall describe the methods to be used by any affected water supplier to notify the public of the emergency and to provide the public with the information needed to understand the seriousness of the situation and to know what shall be done to properly respond to the situation.

3. Water shortage response plans shall identify sources of water for use during water supply emergencies and shall describe plans for receiving prior approvals, achieving access to the water, and adequately treating and distributing the water.

4. Water shortage response plans shall include a description of provisions made for activities to be performed by the Department for Military Affairs or the cabinet, if the emergency plan calls for any actions on the part of either agency. The discussion of such provisions shall include the types of activities to be performed by the Department of Military Affairs or the cabinet, at what level of water shortage these actions are to take place, approximately what it will cost the local community to reimburse the Department of Military Affairs' or the cabinet's expense, and documentation of agreement and approval from the appropriate agency.

5. Water shortage response plans shall describe any legal arrangements that are recommended or would be required to implement or enforce the emergency plans, including at least Public Service Commission approval when applicable.

6. Water shortage response plans shall identify who within the local government shall enforce the emergency provisions in the plan. The plan shall demonstrate that the local government has the authority to enforce these provisions.

(b) Supply contamination response plans. The planning representative shall develop contingency plans to be implemented if a water supply is contaminated or is threatened by contamination.

1. Supply contamination response plans shall describe methods of notifying state and federal agencies of the emergency.

2. Supply contamination response plans shall describe methods to be used by any affected water supplier to notify the public of the emergency and to provide the public with the information needed to understand the seriousness of the situation and to know what shall be done to properly respond to the situation.

3. Supply contamination response plans shall recommend sources of water for use during both short-term and long-term emergencies due to supply contamination and describe plans for receiving prior approvals, achieving access to the water, and adequately treating and distributing the water. Alternate sources of water for short-term use shall not be required to meet the adequacy standards described in subsection (8) of this section.

4. The planning representative shall assess water supplier distribution system capability to cope with contamination.

5. For water supply wells, the planning representative shall evaluate the effectiveness of existing monitoring wells.

(14) Implementation plan. The planning representative shall determine the steps necessary to implement the water supply plan and describe these in section XIII of the final plan document.

(a) Plans for implementation shall include methods for updating and amending the plan document and addressing current or future potential conflicts.

(b) Implementation plans shall contain a timetable for initiation and completion of tasks and shall identify parties responsible for completing tasks.

(c) The planning representative shall create a chart showing the anticipated costs of implementation and describe proposed methods of financing, including reasonable estimates of the interest rates on loans and the per capita cost to water users.

(d) The planning representative shall recommend procedures to coordinate actions of local
government, and other agencies that impact development decisions within the planning unit, with the water supply plan.

(e) The implementation plan shall describe existing authority to implement the plan and identify any legal changes or agreements that are necessary to implement the plan. If the planning council makes any written agreement towards the implementation of the plan or a portion of the plan, section XIII of the final plan document shall describe the nature of the agreement, the parties involved, and when the implementation will happen. Copies of any written agreement or resolution, including agreements to expand treatment facilities or use new water sources, shall be included in section XIV of the plan formulation document.

Section 7. Grant Provisions and Plan Approval. Water supply planning grants provided by the cabinet shall be used only to create water supply plans, and shall not be used for implementing water supply plans or to construct water supply facilities or distribution systems. Planning grants may be provided separately or jointly for phase one and phase two planning activities.

(1) Funding application.

(a) A county or planning representative may apply for a planning grant by submitting a form entitled "Water Supply Planning Financial Assistance Application," dated March, 1991 and hereby incorporated by reference. Copies of this form may be reviewed or obtained from cabinet offices at 300 Sower Boulevard, Frankfort, Kentucky 40601, between 8 a.m. and 4:30 p.m. from Monday through Friday, except holidays.

(b) The application period for requesting a planning grant for state fiscal year 1991 and 1992 funds shall be from the effective date of this administrative regulation until ninety (90) days thereafter. The application deadline for subsequent state fiscal years shall be May 1.

(c) The cabinet shall review the application and may require the workplan to be revised if the cost of the water supply plan is unreasonable.

(2) Funding priorities. Water supply planning grants from available funds shall be distributed annually, as available. Unfunded applications from one (1) fiscal year may be carried over to the next fiscal year in their priority order. The cabinet shall prioritize grant applications according to water supply needs and budget constraints, within the following categories of priority:

(a) First priority shall be given to grant applicants from either counties within which lie one (1) or more water suppliers that have demonstrated drought vulnerability or significant conflicts related to shared sources of water supply or source degradation and which serve thirty-five (35) percent of the county population, or counties in which thirty-five (35) percent of the county population is solely dependent on groundwater and are not located adjacent to a stream with average flow of at least 15,000 cubic feet per second or an impoundment of at least 300,000 acre-feet. The cabinet may provide from eighty (80) to 100 percent of planning costs for these counties if they are within multicounty units, and eighty (80) to eighty-five (85) percent if they are single-county units.

(b) Second priority shall be given for phase one planning activities only, and shall be given to grant applicants from multicounty planning units that include a water supplier with demonstrated drought vulnerability or significant conflicts related to water supply planning. The cabinet may provide these grant applicants eighty (80) to 100 percent of phase one planning costs.

(c) Third priority shall be given for phase one planning activities only, and shall be given to grant applications from counties without demonstrated drought vulnerability or water supply conflicts. The cabinet may provide from eighty (80) to 100 percent of planning costs for counties from multicounty planning units and eighty (80) to eighty-five (85) percent if they are single county units.

(d) Fourth priority shall be given to grant applicants from planning units without demonstrated drought vulnerability or water supply conflicts. The cabinet may provide from eighty (80) to 100 percent of planning costs for these counties if they are from multicounty planning units, and eighty (80) to eighty-five (85) percent if they are single-county planning units.
(3) Local funding contributions.

(a) In-kind services. Local planning fund contributions may include up to fifty (50) percent of costs incurred during planning activities. Written records of these services shall be submitted to the cabinet for approval before matching funds will be released and documented in Appendix PFD-A of the plan formulation document.

1. Activities that shall not be considered as in-kind services include those associated with advertising for, selecting, or administering contractual agreements and those associated with expenses incurred prior to notification to the cabinet.

2. Records shall be maintained to document expenditures of any in-kind services where cost-share financial assistance has been requested for plan development. These records shall be included in Appendix PFD-A of the plan formulation document and available for review when any financial assistance request is made for a partial reimbursement prior to final plan approval.

(b) Expenses incurred prior to grant approval. The cabinet may approve planning expenditures that have been incurred after notification to the cabinet of the intent to develop a water supply plan and prior to grant approval. If approved, these expenses shall be reimbursed at a rate of forty-five (45) percent. No more than seventy (70) percent of total reimbursed expenses shall have been performed prior to grant approval.

(4) Plan approval. The planning council shall submit one (1) copy of the plan formulation document and three (3) copies of the final plan document to the cabinet.

(a) No plan shall be approved by the cabinet unless it meets all the provisions of this administrative regulation and is consistent with state laws and administrative regulations.

(b) The cabinet shall examine the plan for consistency with other water supply plans that have been approved by the cabinet pursuant to this administrative regulation. The cabinet shall notify planning councils of inconsistencies between water supply plans. If any portion of any county in a planning unit is located within the watershed of the Kentucky River, the cabinet shall examine the plan for consistency with administrative regulations promulgated by the Kentucky River Authority and with the Kentucky River Authority’s water resource plan and notify the planning council and the Kentucky River Authority of inconsistencies.

(c) The cabinet shall notify the planning council within ninety (90) days if any portion of the plan document is not consistent with statutes or administrative regulations and shall identify any portion of the plan document requiring revision. The planning council shall subsequently submit a revision within 120 days after receiving notice of disapproval. The cabinet may extend the time period allowed to revise a plan document if a planning council submits written justification to postpone the deadline.

(d) Payments. No payments shall be made to a grant recipient for work that does not conform to the approved plan. As part of the grant contractual agreement, the cabinet may specify a schedule for payment based on submittal and approval of work elements. No more than eighty (80) percent of any total grant allotment shall be paid until grant conditions have been met and work completed under the planning grant has been approved by the cabinet. (17 Ky.R. 3054; 3457; 18 Ky.R. 22; 6-26-1991; TAm eff. 11-25-2008; TAm eff. 7-8-2016; Crt eff. 8-9-2018.)